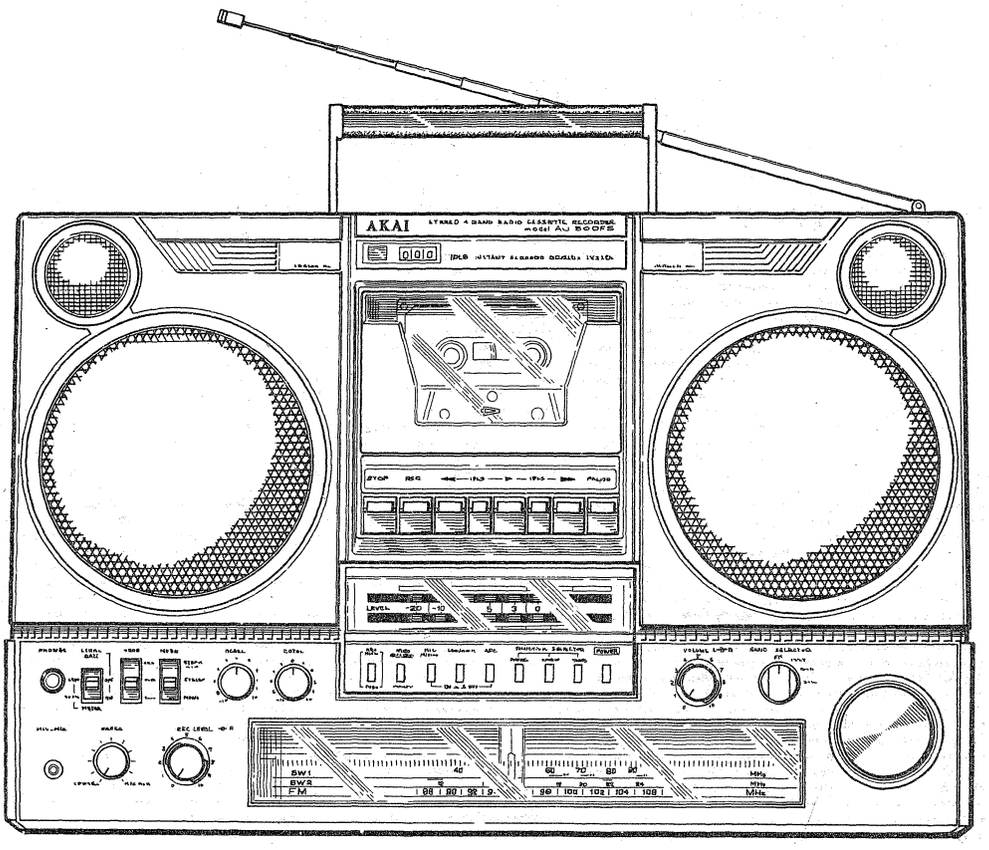
AJ-500FS/FL

# AKAI SERVICE MANUAL




## 4 BAND STEREO RADIO CASSETTE RECORDER

## MODEL AJ-500FS/FL

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SECTION 1

# SERVICE MANUAL

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For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

# I. TECHNICAL DATA

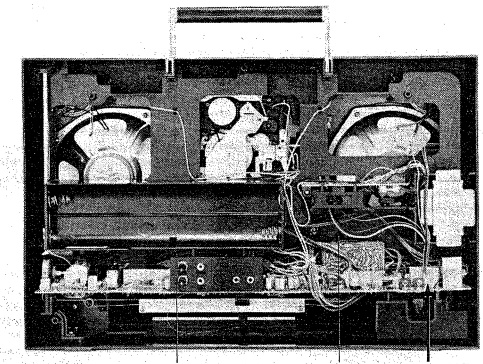
| | | |
|---|---|---|
| TYPE | | 4 Band Stereo Radio Cassette Recorder |
| FREQUENCY RANGES: | AJ-500FS | FM: 87.6–108MHz<br>MW: 525–1,605kHz<br>SW1: 3.9–12MHz<br>SW2: 12–26MHz |
| | AJ-500FL | FM: 87.6–107MHz<br>LW: 150–290kHz<br>MW: 525–1,605kHz<br>SW: 4.9–12MHz |
| ANTENNAS | | Rod Antenna for FM, SW and SW2 Bands<br>Built-in Bar Antenna for LW, MW and SW1 Bands<br>External Antenna Terminal for all Bands |
| SPEAKER | | 2 Way 4 Speaker<br>Woofer: 16 cm x 2<br>Tweeter: 5 cm x 2 |
| MAX. POWER OUTPUT | | 6W x 2 |
| TAPE | | Philips Type Cassette Tape |
| TRACK SYSTEM | | 4 Track 2 Channel Stereo System |
| MONITOR SYSTEM | | Variable Monitor System |
| F.F. & REWIND TIME | | Within 120 sec. (Using a C-60 Cassette Tape) |
| WOW & FLUTTER | | 0.09% (WRMS) |
| POWER REQUIREMENTS | | 120V/60Hz for Canada<br>220V/50Hz for Europe except UK<br>240V/50Hz for UK & Australia<br>110-120V/220-240V, 50/60Hz for Other Countries |
| POWER CONSUMPTION | | 40W |
| DIMENSIONS | | 500 (W) x 323 (H) x 162 (D)mm (19.7" x 12.7" x 6.4") |
| WEIGHT | | 6.5 kg (14.3 lbs) |

* For improvement purposes, specifications and design are subject to change without notice.

# II . DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

3

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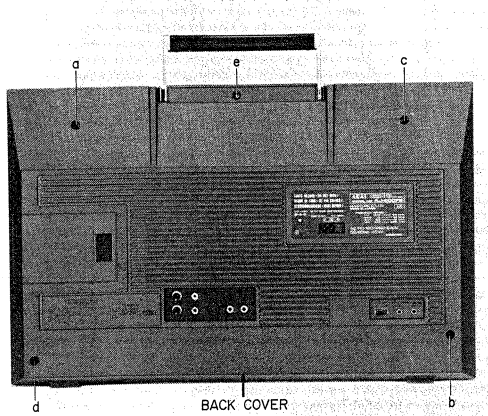


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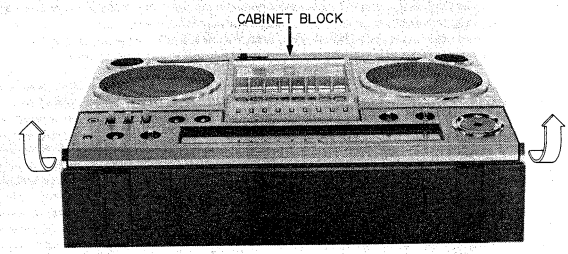


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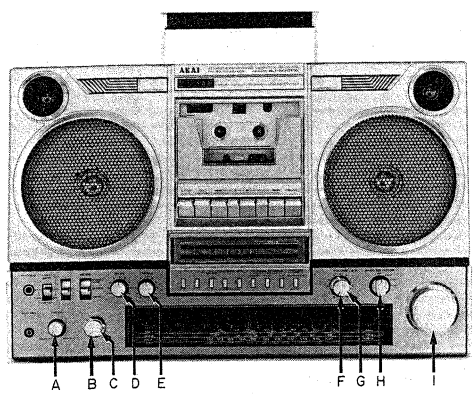


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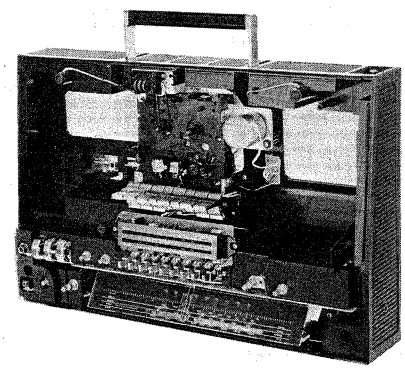
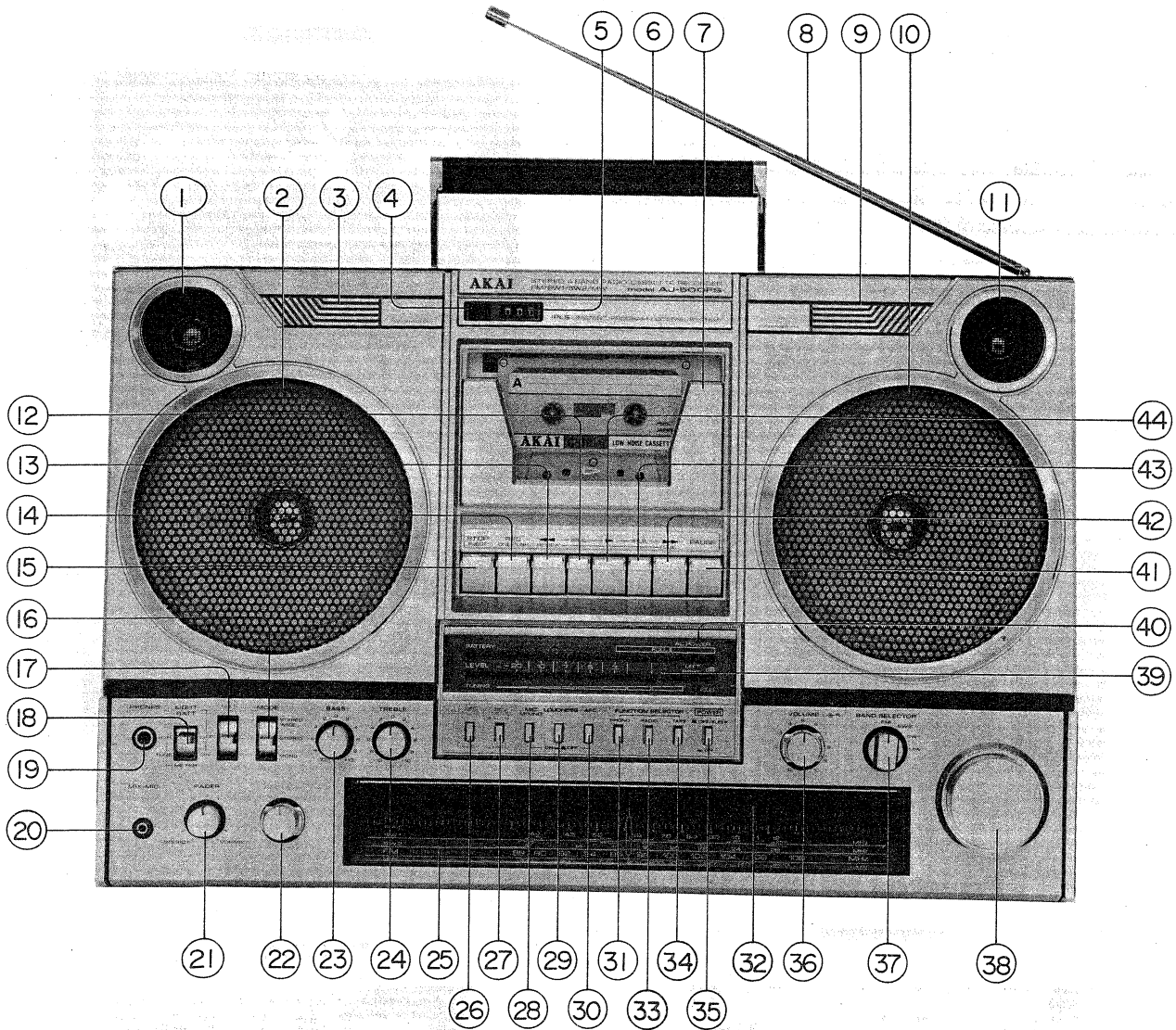


# III. CONTROLS




1. LEFT TWEETER
2. LEFT WOOFER
3. BUILT-IN MICROPHONE (LEFT)
4. RESET BUTTON
5. TAPE COUNTER
6. CARRYING HANDLE
7. CASSETTE RECEPTACLE
8. ROD ANTENNA
9. BUILT-IN MICROPHONE (RIGHT)
10. RIGHT WOOFER
11. RIGHT TWEETER
12. IPLS REVIEW KEY (IPLS)
13. REVIEW/REWIND KEY (◀◀)
14. RECORDING KEY (REC)
15. STOP/EJECT KEY
16. MODE SWITCH
17. TAPE SELECTOR SWITCH
18. METER SELECTOR SWITCH
19. HEAD PHONES JACK
20. MIX-MIC (Mixing Microphone Input) JACK
21. FADER CONTROL
22. LEFT AND RIGHT RECORDING LEVEL CONTROLS
23. BASS CONTROL (BASS)
24. TREBLE CONTROL (TREBLE)
25. FM STEREO INDICATOR LAMP
26. REC MUTE SWITCH
27. RECORDING MODE SWITCH (REC MODE)
28. MICROPHONE MIXING SWITCH (MIC MIXING)

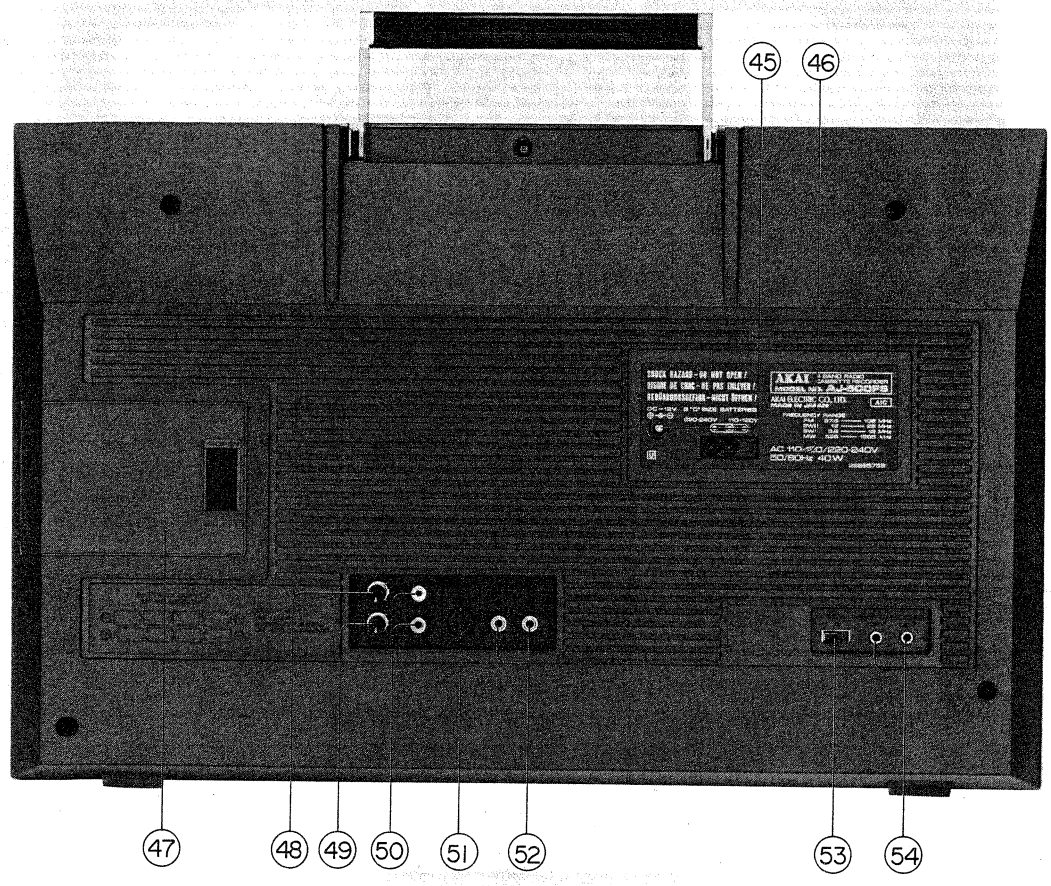



Fig. 1 Controls

29. LOUDNESS SWITCH (LOUDNESS)
30. AFC (Automatic Frequency Control) SWITCH
31. PHONO SWITCH
32. TUNING DIAL SCALE
33. RADIO SWITCH
34. TAPE SWITCH
35. POWER/SLEEP SWITCH
36. LEFT AND RIGHT VOLUME CONTROLS
37. BAND SELECTOR SWITCH
38. TUNING KNOB
39. LED INDICATORS (Battery Check, Tuning, Recording and Playback Levels)
40. AC POWER INDICATOR LAMP
41. PAUSE KEY
42. CUE/FORWARD KEY (▶▶)
43. IPLS CUE KEY (IPLS)
44. PLAY KEY (▶)
45. EXT PWR JACK
46. AC INLET
47. BATTERY COMPARTMENT
48. ANTENNA TERMINAL
49. GROUND TERMINAL
50. PHONO JACKS
51. LINE INPUT/OUTPUT JACK (DIN)
52. EXT MIC JACK
53. BEAT CUT SWITCH
54. EXT SPEAKERS JACK

# IV. PRINCIPAL PARTS LOCATION

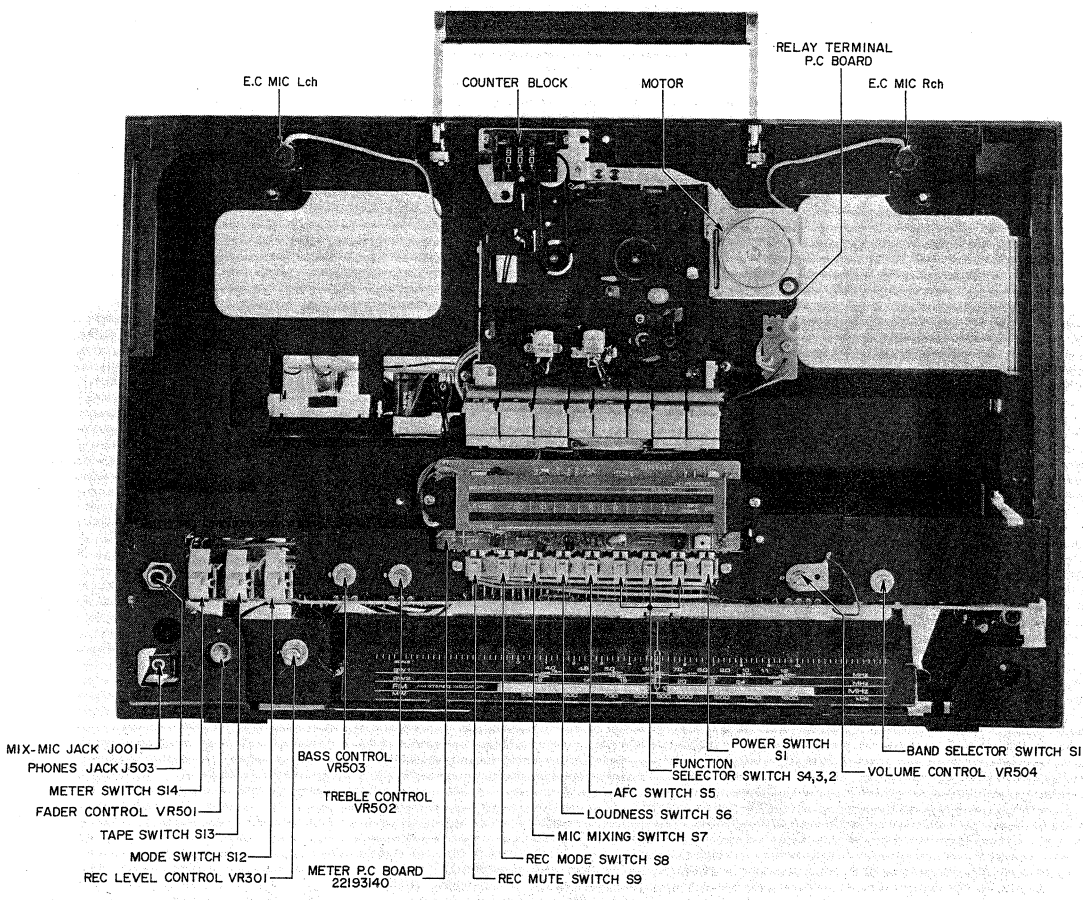



Fig. 2 Front View

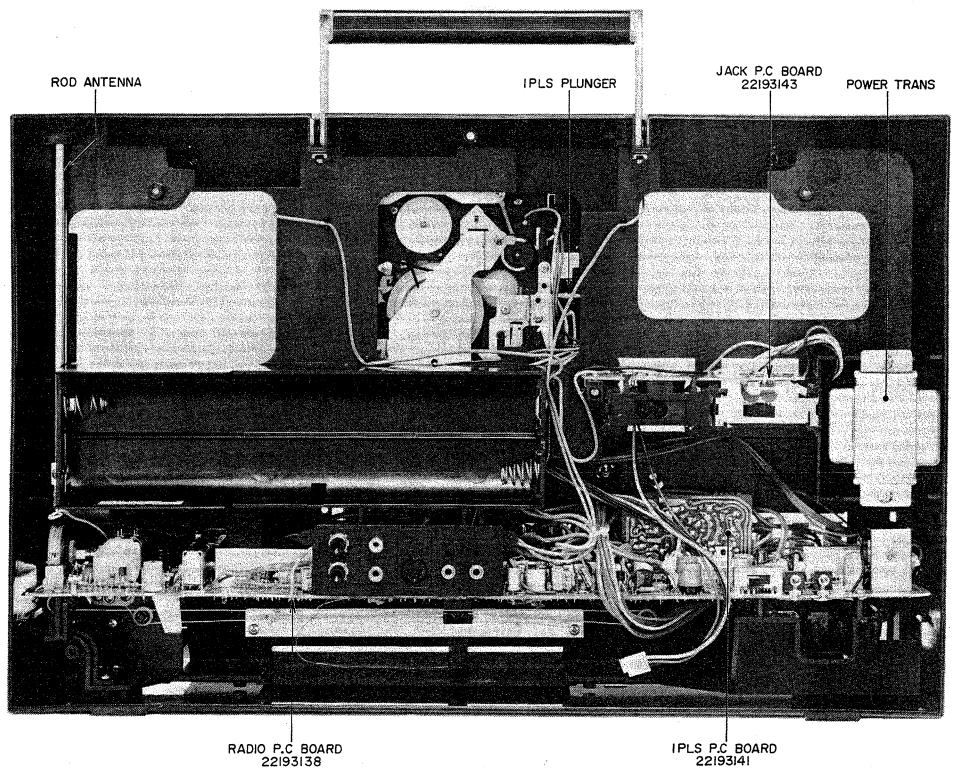



Fig. 3 Rear View

# V. VOLTAGE AND CYCLE CONVERSION

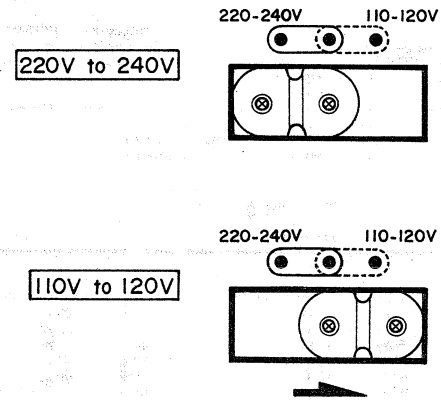



Fig. 4 Voltage Conversion (U/T only)

## 1. VOLTAGE CONVERSION

1) U/T Model (Refer to Fig. 4)

Voltage conversion to suit the different regions is carried out by the way the AC plug is inserted into the AC inlet at the rear.

The AC inlet is normally at 220-240V so please leave as it is for regions where the voltage is 220V to 240V.

If the region's voltage is 110V to 120V slide the AC plug to the right while slightly inserted and then fully insert into the new position. There is no need to change the fuse.

2) Models other than U/T

The voltages respectively rated cannot be converted.

## 2. CYCLE CONVERSION

No cycle conversion is required, because a DC motor is employed.

# VI. IPLS OPERATION

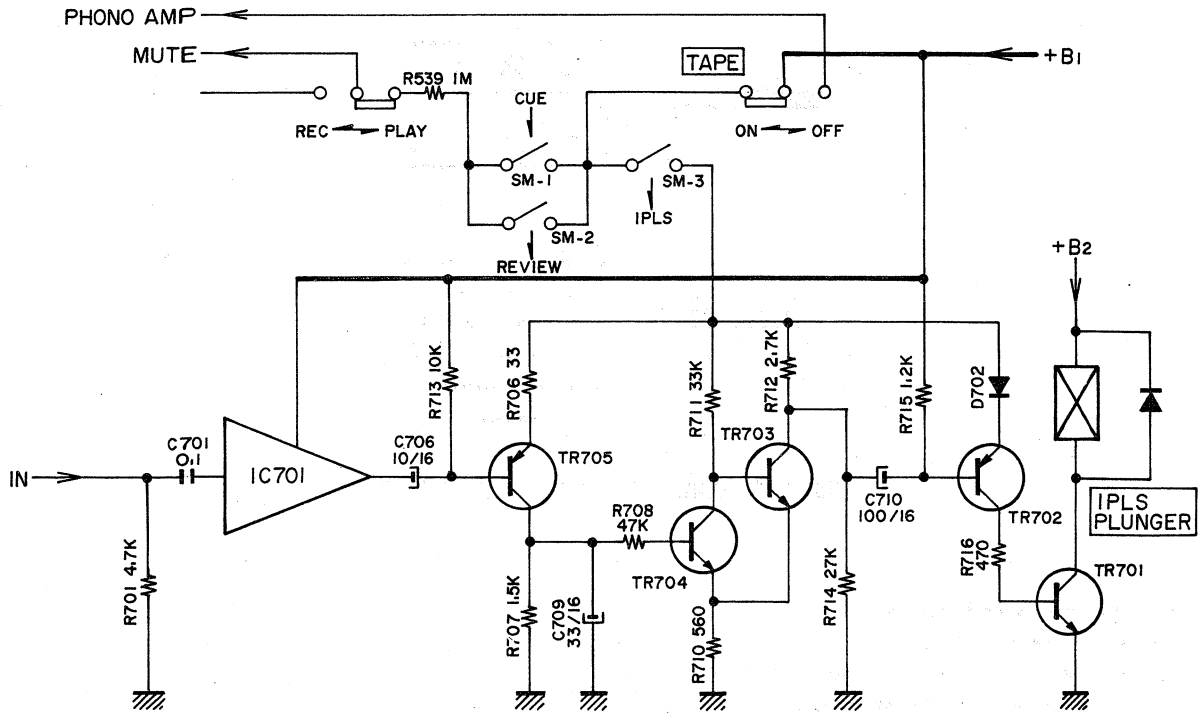



Fig. 5

## 1. OUTLINE OF THE IPLS (Instant Program Locating System)

IPLS is a circuit which detects the blank portion of the tape either in front of or behind the present position and playback begins at that point. For example, if the PLAY and IPLS REVIEW keys are depressed simultaneously, when the blank portion between the present song and previous song is reached only the IPLS REVIEW key is released and playback begins automatically. Or, if the PLAY and IPLS CUE keys are depressed, simultaneously, when the blank portion between the present song and the next song is reached, only the IPLS CUE key is released and playback begins automatically at the beginning of the next song.

In IPLS detection, the CUE or REVIEW signals are used.

## 2. CIRCUIT OPERATION EXPLANATION (Refer to Fig. 5)

When the PLAY and IPLS REVIEW or CUE keys are depressed simultaneously the REVIEW or CUE signals input into IC701 are amplified by IC701, TR705 become the base bias for TR704 and TR704 comes ON. As a result, TR703, TR702 and TR701 switch OFF and the IPLS plunger does not operate.

The potential difference for both terminals of C710 is 1V. At this point when the signal from the music etc. disappears and because base bias is no longer being added to TR704 it switches OFF.

Next, base bias is added to TR703 and it switches ON, the potential for both terminals of C710 becomes 9V and the charging current flows.

Due to this, TR702's base electrical potential drops and both TR702 and TR701 come ON. Now the IPLS plunger operates, only the IPLS key is released and playback begins. When the IPLS key is released C710 is in a charged condition but when the IPLS key is next depressed, the potential difference for both terminals of C710 is 1V and the electrical charge is discharged. Furthermore the IPLS plunger does not operate when the IPLS key is not depressed because +B is not being added to TR703-TR705.

# VII. MECHANISM AND HEAD ADJUSTMENT

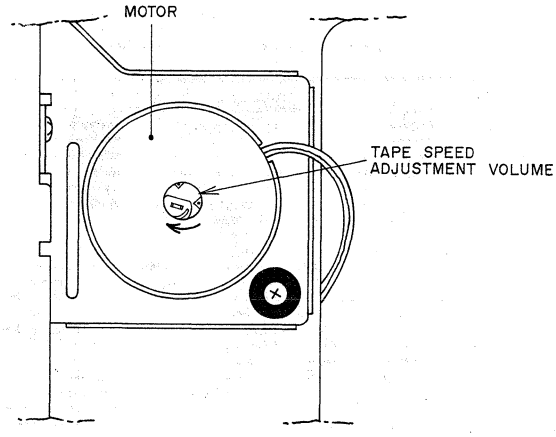



Fig. 6 Tape Speed Adjustment

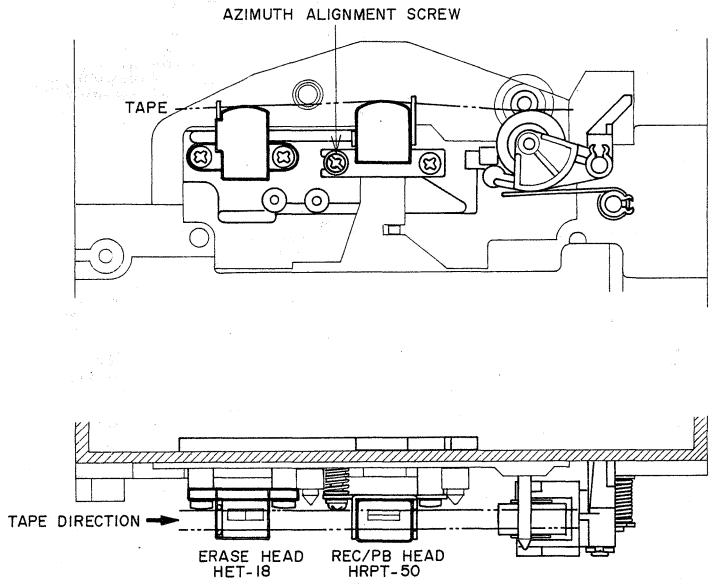



Fig. 7 Head Adjustment

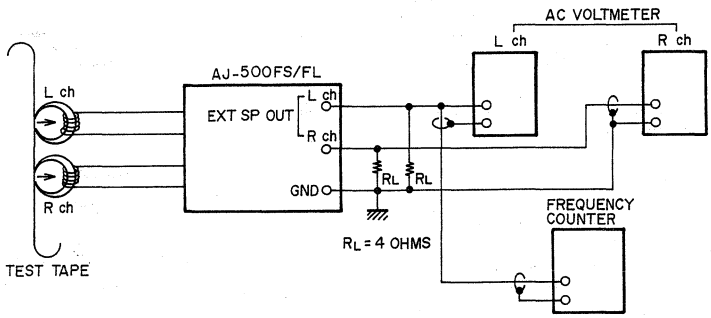



Fig. 8 Instrument Connection

1. **TAPE SPEED ADJUSTMENT (Refer to Figs. 6, 8)**
   Connect the Frequency Counter to the EXT SP OUT Jack. Playback a 1,000 Hz cassette test tape and adjust the tape speed adjustment volume to obtain a tape speed of 1,000 Hz ±2%.

2. **HEAD ADJUSTMENT (Refer to Figs. 7, 8)**
   Connect the High Sensitivity AC Voltmeter to the EXT SP OUT Jacks. Playback a 10 kHz cassette test tape and adjust the azimuth alignment screw until the output level is at maximum on both channels.

NOTE: Connect the EXT SP OUT Jacks to the load resistance $R_L$ (4 ohms).

# VIII. TUNER ADJUSTMENT

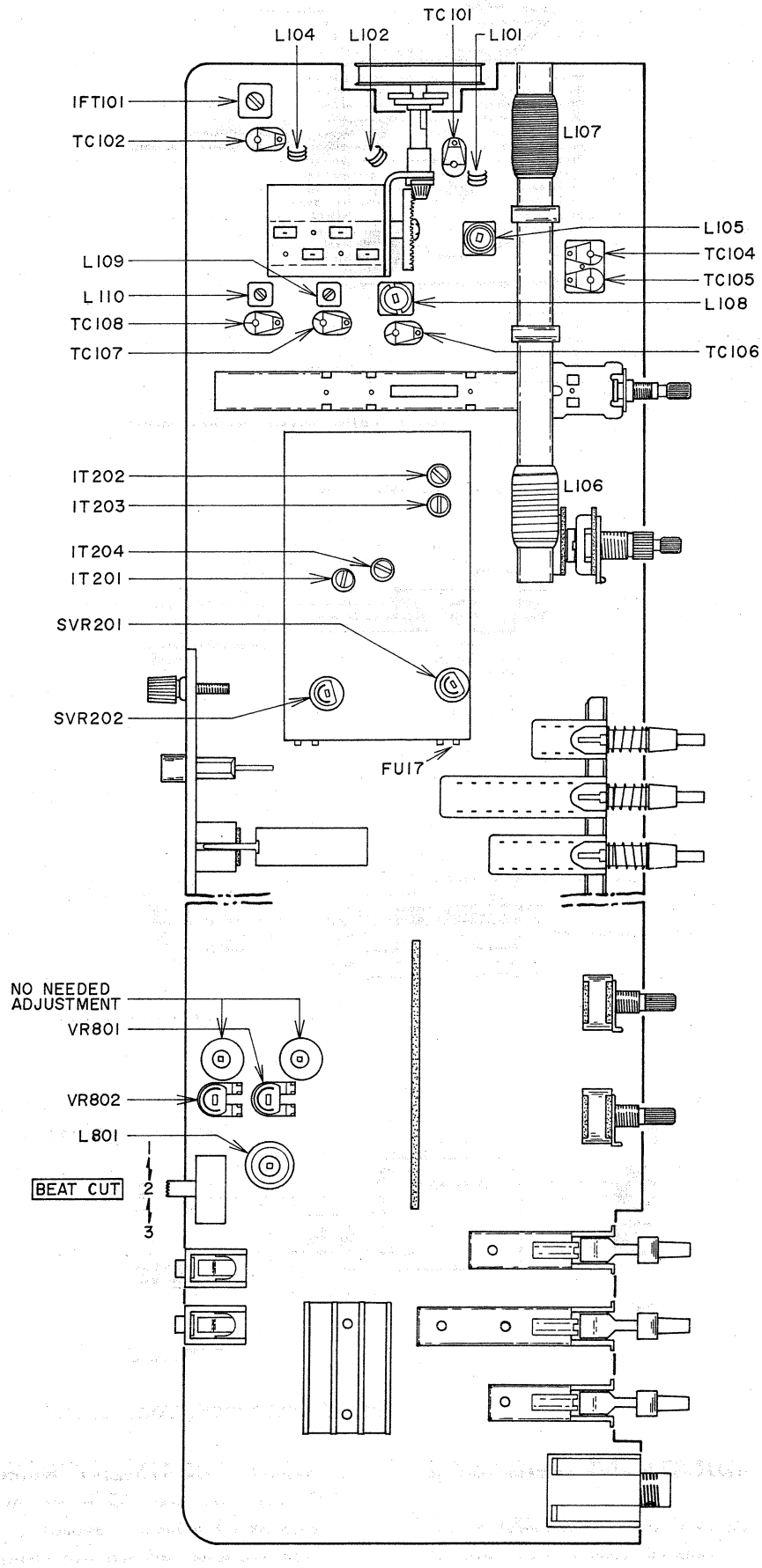



Fig. 9 Adjustment Points

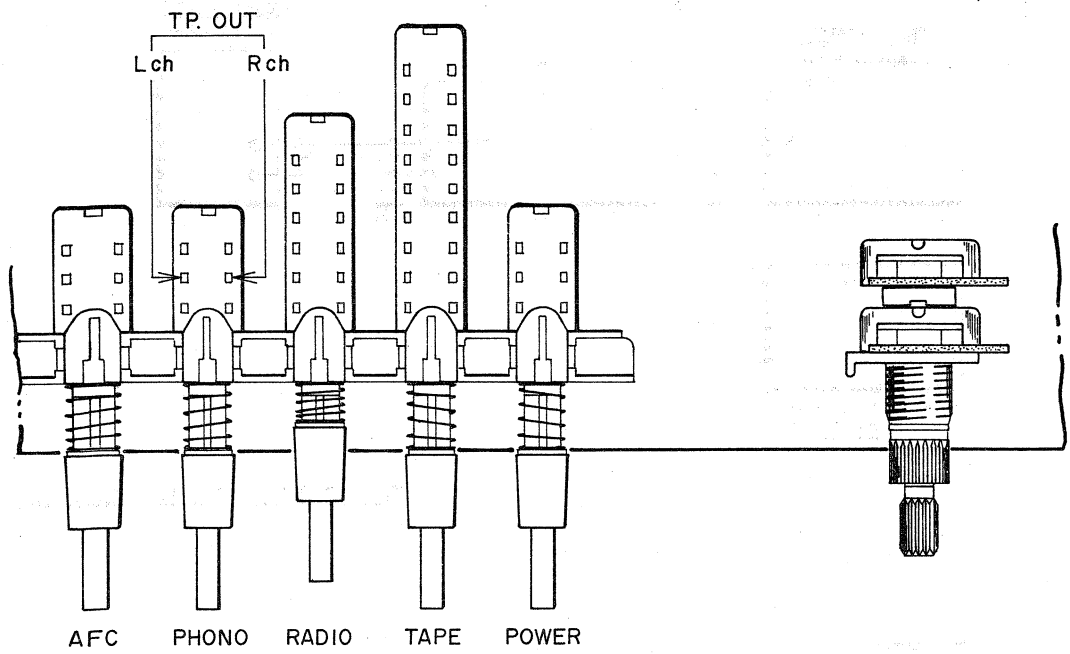



Fig. 10 Check Points

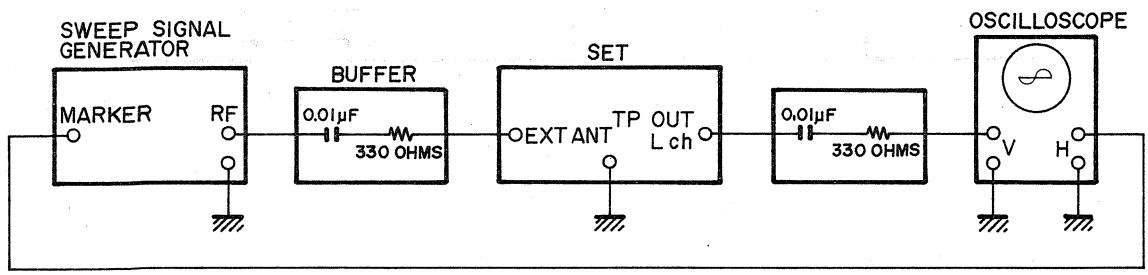



Fig. 11 FM IF Adjustment

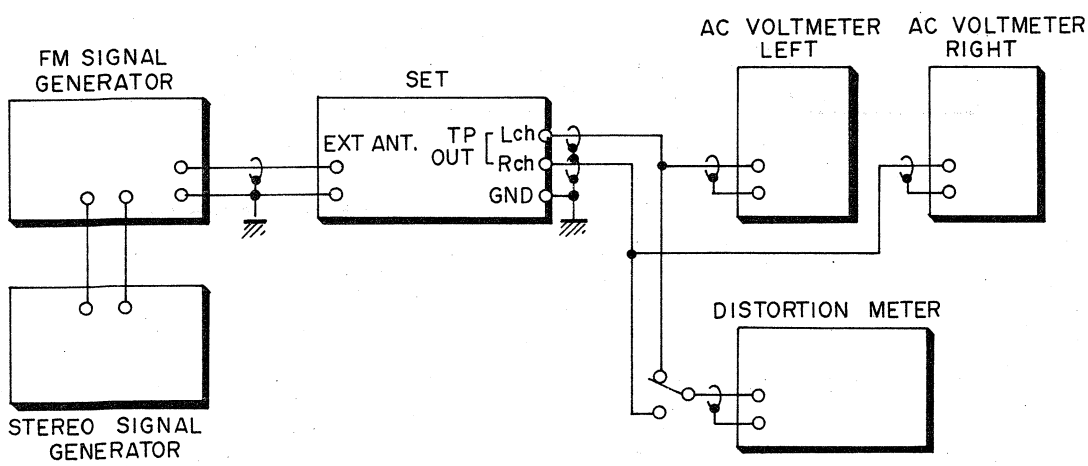



Fig. 12 FM Tracking and Stereo Adjustment

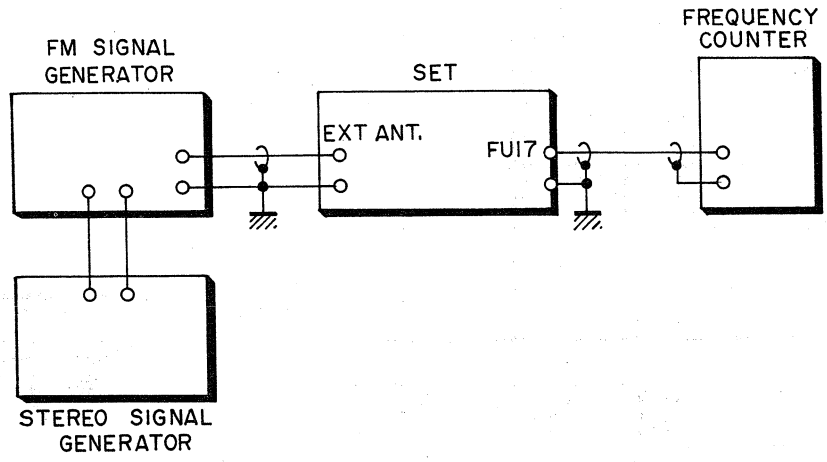



Fig. 13 PLL 19 kHz Adjustment

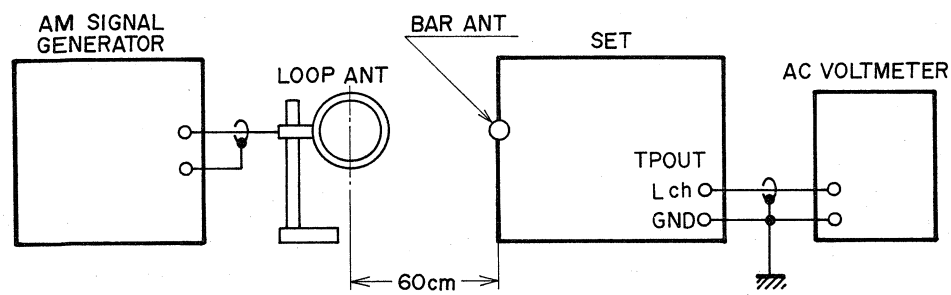



Fig. 14 AM Adjustment

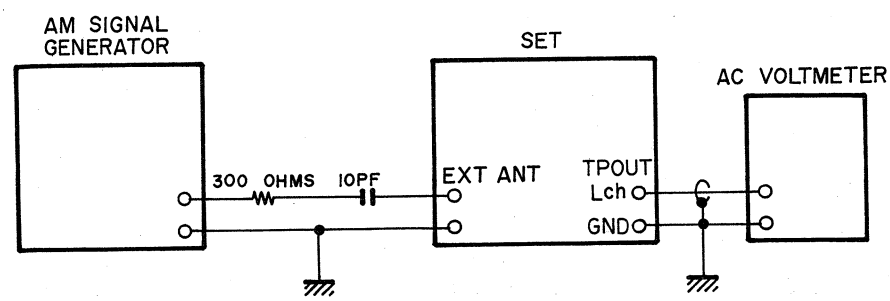



Fig. 15 SW, SW2 Adjustment

## 1. FM SECTION ADJUSTMENT (Model AJ-500FS/FL)

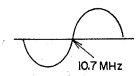
| Step | Adjustment Items | Adjustment Points | Results | Remarks |
|---|---|---|---|---|
| 1 | IF Adjustment | IFT101 (VLT)<br>IT201 (BLK) |  <br>Maximum S curve waveform (Upper/ lower waveform symmetricity) | Refer to Fig. 11 |
| 2 | Frequency Range | L104 (88 MHz)<br>TC102 (106 MHz) | 88 106<br>Maximum Output<br>Minimum Distortion | Refer to Fig. 12 |
| 3 | Sensitivity | L101, 102 (88 MHz)<br>TC101 (106 MHz) | Maximum Output<br>Minimum Distortion | Refer to Fig. 12 |
| 4 | PLL IC<br>Free Running<br>Frequency | SVR201 1 kohm | 19.00 kHz ±30Hz | Refer to Fig. 13 |
| 5 | Stereo<br>Indicator Lamp<br>Confirmation | | | 98 MHz, 60 dB (stereo) input. If stereo indicator lamp fails to light, this means that stereo broadcasts are not being received. (Stereo separation not attained) |
| 6 | Stereo Separation<br>(Left → Right) | SVR202 500 ohms | Minimum output<br>at Rch | 98 MHz, 60 dB (Stereo)<br>Lch input.<br>Refer to Fig. 12 |
| 7 | Stereo Separation<br>(Right → Left) | SVR202 500 ohms | Minimum output<br>at Lch | 98 MHz, 60 dB (Stereo)<br>Rch input.<br>Refer to Fig. 12. |

Chart-1

NOTE: Take the audio output from the PHONO switch terminal as shown in Fig. 10.

## 2. AM SECTION ADJUSTMENT (Refer to Figs. 9, 10, 14, 15)

| Step | Band | Adjustment Items | Adjustment Points | | Results |
|---|---|---|---|---|---|
| | | | AJ-500FS | AJ-500FL | |
| 1 | MW 525 kHz to 1,605 kHz | IF Adjustment | IT202 (YLW) IT203 (WHT) IT204 (BLK) | IT202 (YLW) IT203 (WHT) IT204 (BLK) | Maximum Output |
| 2 | | Frequency Range | L110 (RED) (530 kHz) TC108 (1,600 kHz) | L109 (RED) (530 kHz) TC107 (1,600 kHz) | 530 1600 Maximum Output |
| 3 | | Sensitivity | L107 (Bar Antenna Coil. 530 kHz) TC104 (1,600 kHz) | L106 (Bar Antenna Coil. 530 kHz) TC105 (1,600 kHz) | Maximum Output |
| 4 | SW 4.9 MHz to 12 MHz | Frequency Range | | L108 (5.0 MHz) TC106 (12 MHz) | 5.0 12 Maximum Output |
| 5 | | Sensitivity | | L105 (5.5 MHz) | Maximum Output |
| 6 | SW1 3.9 MHz to 12 MHz | Frequency Range | L109 (BLK) (4.0 MHz) TC107 (12MHz) | | 4.0 12 Maximum Output |
| 7 | | Sensitivity | L106 (Bar Antenna Coil. 4.0 MHz) TC105 (12 MHz) | | Maximum Output |
| 8 | SW2 12 MHz to 26 MHz | Frequency Range | L108 (12 MHz) TC106 (26 MHz) | | 12 26 Maximum Output |
| 9 | | Sensitivity | L105 (14 MHz) | | Maximum Output |
| 10 | LW 150 kHz to 290 kHz | Frequency Range | | L110 (160 kHz) TC108 (260 kHz) | 160 260 Maximum Output |
| 11 | | Sensitivity | | L107 (Bar Antenna Coil. 160 kHz) TC104 (260 kHz) | Maximum Output |

Chart-2

NOTE: Take the audio output from the Lch or Rch terminal of the PHONO switch.

# IX. AMPLIFIER ADJUSTMENT

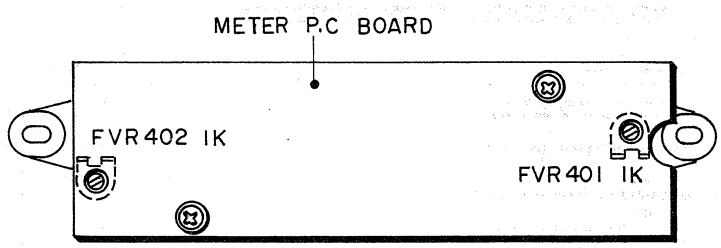



Fig. 16 LED LEVEL Sensitivity Adjustment

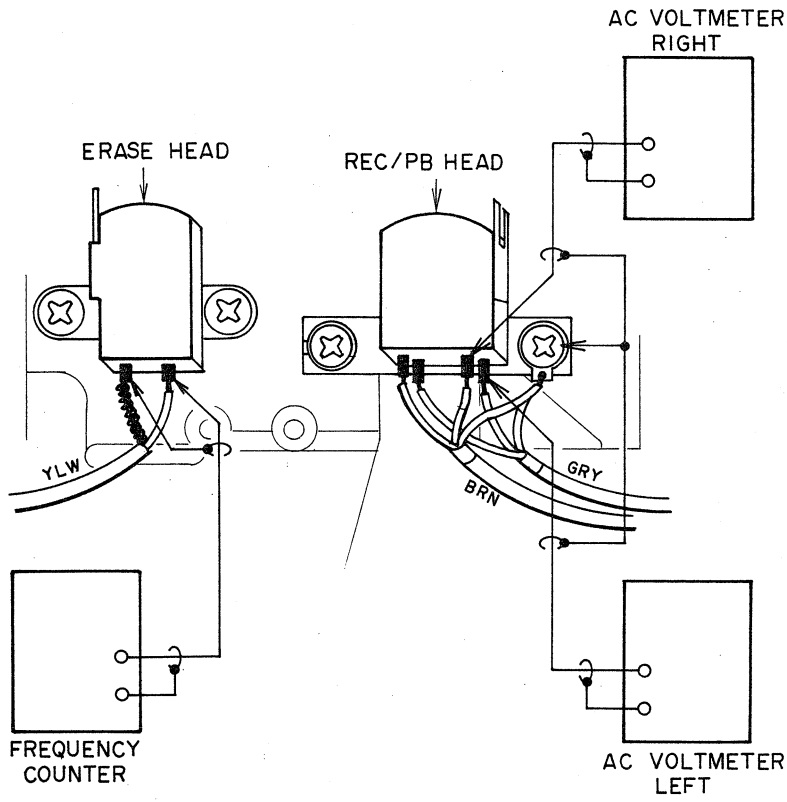



Fig. 17 Recording Bias Voltage Adjustment

**1. LED LEVEL SENSITIVITY ADJUSTMENT (Refer to Fig. 16)**

Playback a 333 Hz 0VU test tape. Then, adjust the FVR401 1 kohm (Lch) and FVR402 1 kohm (Rch) so that the LED level indicator will read 0 dB.

**2. BIAS OSCILLATION FREQUENCY ADJUSTMENT (Refer to Figs. 9 and 17)**

As shown in Fig. 17, connect a frequency counter to both terminals on the erasing head. Throw the BEAT CUT switch to the 1 position to put the radio set in the REC/PAUSE mode. Adjust Bias Osc Coil L801 so that the frequency counter will read 64 kHz ±1 kHz.

**3. RECORDING BIAS VOLTAGE ADJUSTMENT (Refer to Figs. 9 and 17)**

As shown in Fig. 17, connect an AC voltmeter to the REC/PB head terminal and the grounding circuit. In the REC/PAUSE mode, adjust the FVR801 10 kohms (Lch) and FVR802 10 kohms (Rch) so that the AC voltmeter will read 3.8 mV.

NOTE: 1. Throw the FUNCTION SELECTOR switch to the TAPE position.
2. Throw the TAPE SELECTOR switch to the NORMAL position.
3. Throw the REC MODE switch to the MANUAL position and turn down the REC volume.

# X. CLASSIFICATION OF VARIOUS P.C BOARD

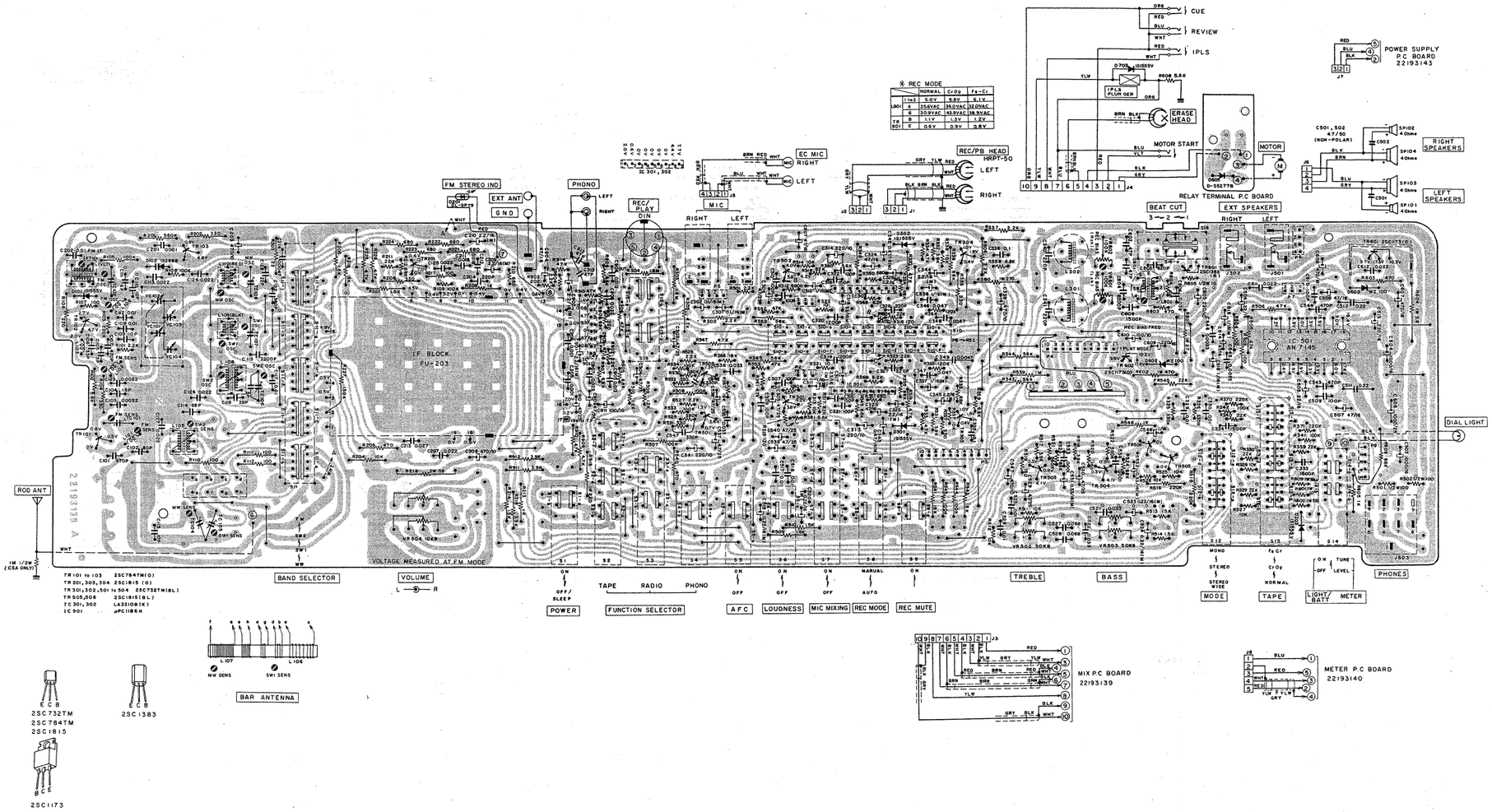
## 1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

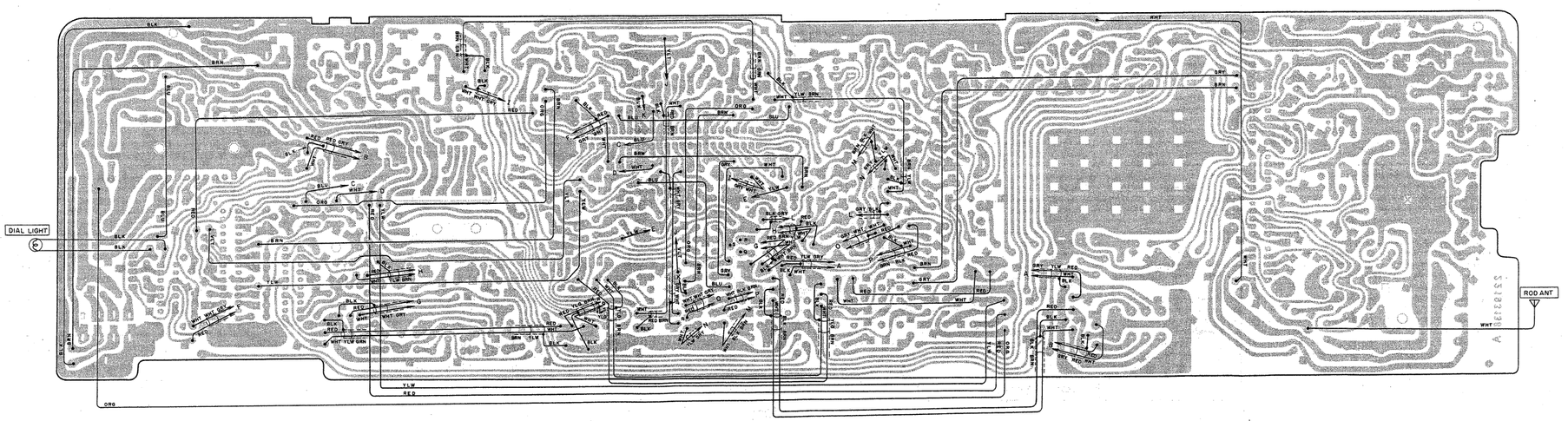
| P.C Board Title | P.C Board Number |
|---|---|
| Radio P.C Board (AJ-500FS/FL) | 22193138 |
| Mixing P.C Board (AJ-500FS/FL) | 22193139 |
| Meter P.C Board (AJ-500FS/FL) | 22193140 |
| IPLS P.C Board (AJ-500FS/FL) | 22193141 |
| Power Supply P.C Board (U/T) | 22193143 |
| Power Supply P.C Board (Others) | 22193142 |
| Relay Terminal P.C Board | |

Chart-3

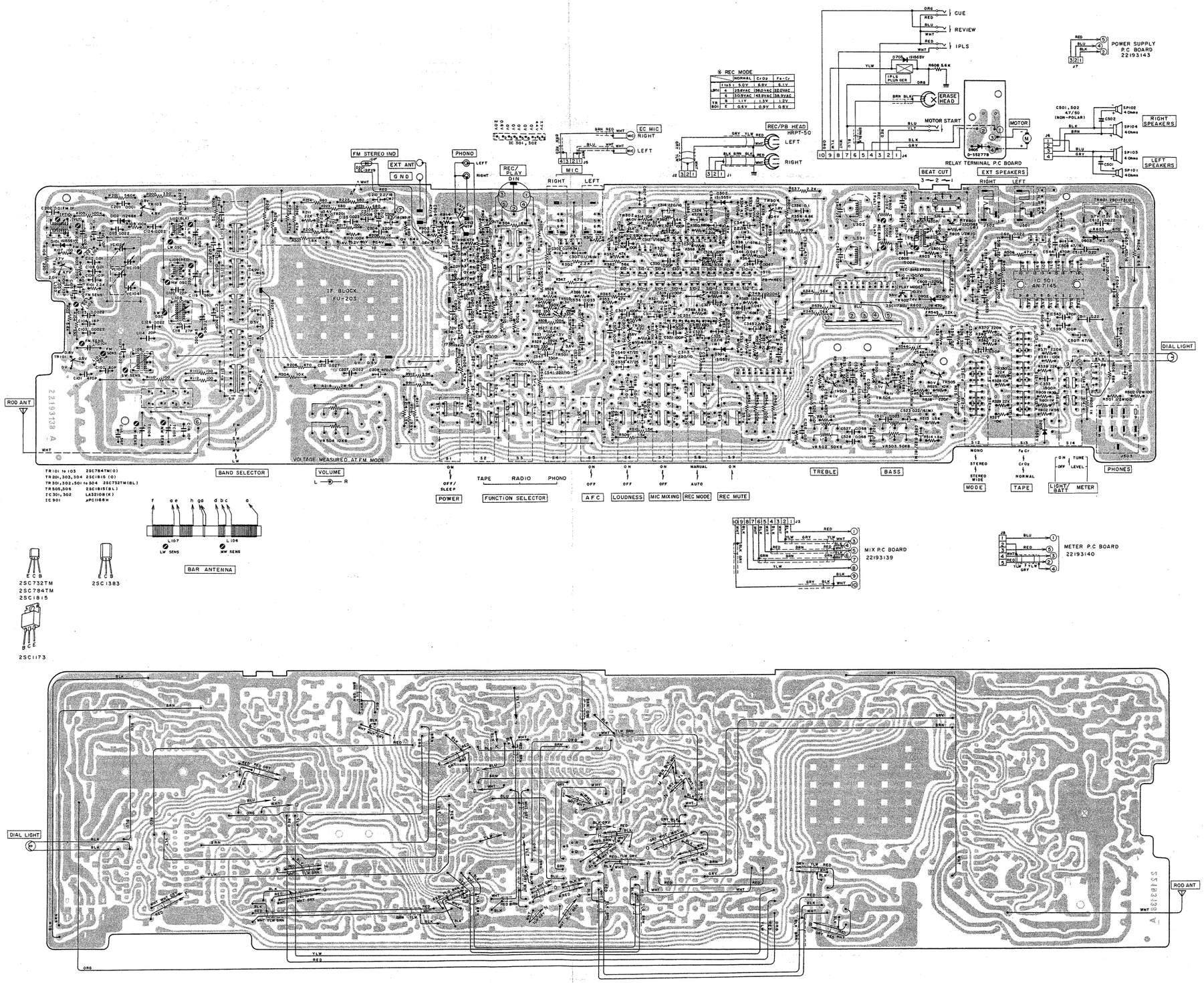
## 2. COMPOSITION OF VARIOUS P.C BOARDS

### 1. Radio P.C Board 22193138 and Relay Terminal P.C Board (AJ-500FS)

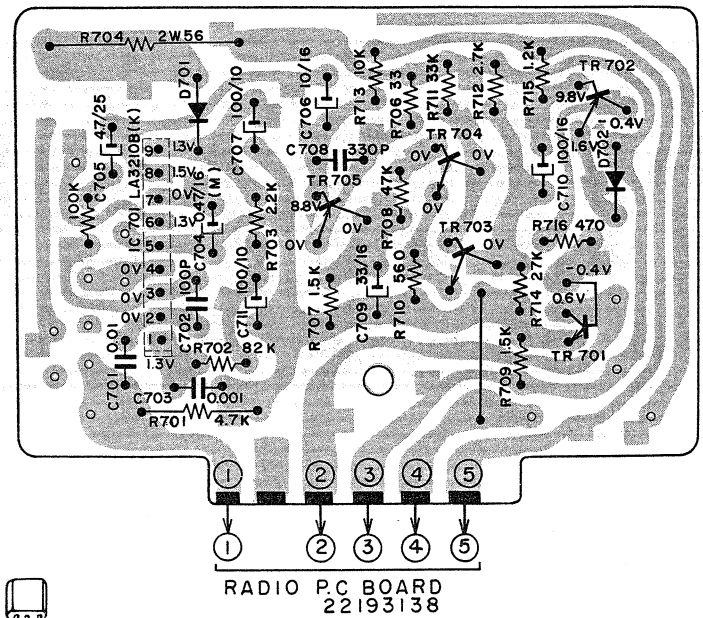


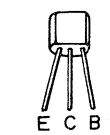
2. Radio P.C Board 22193138 and Relay Terminal P.C Board (AJ-500FL)



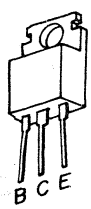
3. IPLS P.C Board 22193141




TR 701 2SC1173(O)
TR 702.705 2SA1015(O)
TR 703.704 2SC1815(O)
D701 to 703 1S1555V

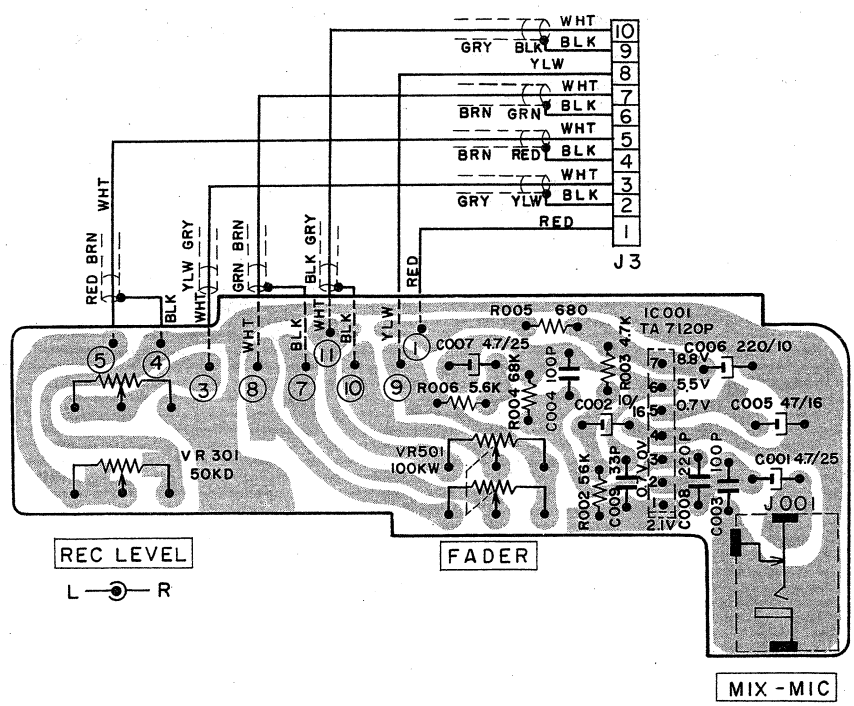



2SA1015
2SC1815

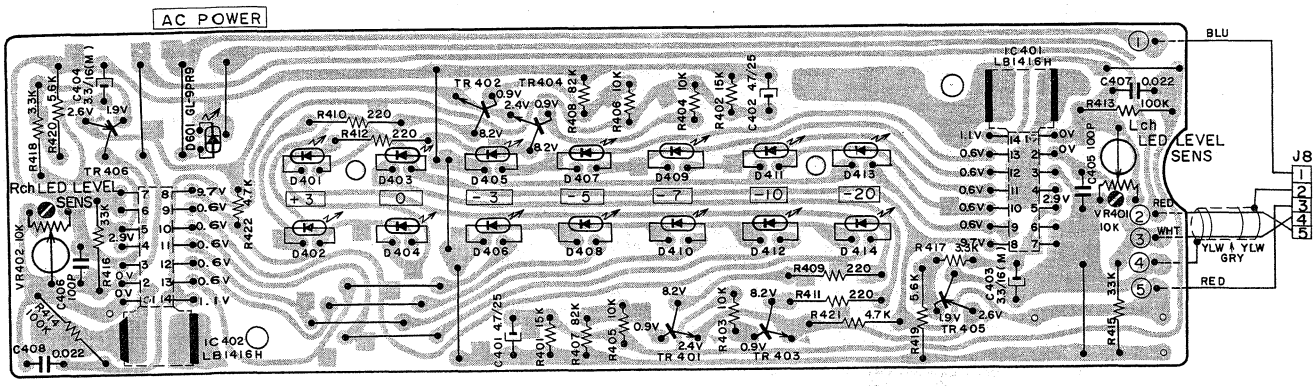



2SC1173

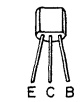
4. Mixing P.C Board 22193139



## 5. Meter P.C Board 22193140

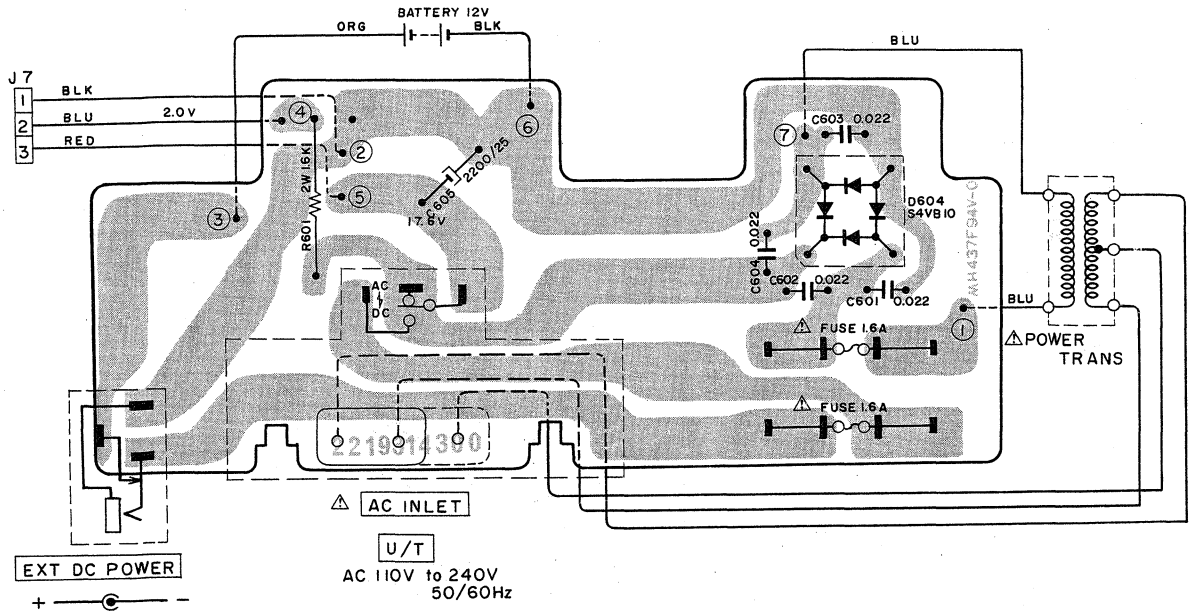



TR401 to 404 2SC1815(O)
TR405, 406 2SA1015(O)
D401 to 404 GL-9PR2
D405 to 414 GL-9PG2




2SA1015
2SC1815

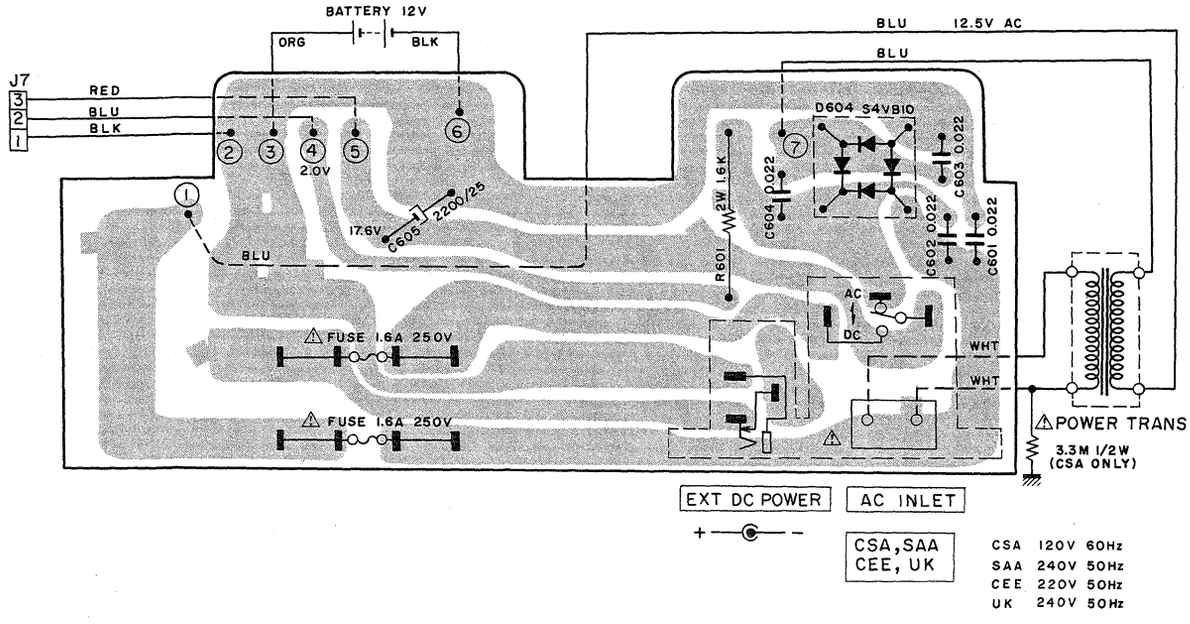
## 6. Power Supply P.C Board 22193143 (U/T)




WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES CONPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

7. Power Supply P.C Board 22193142 (Others)




WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES CONPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

SECTION 2

# PARTS LIST

TABLE OF CONTENTS

1. MECHA BLOCK ..... 28
2. RADIO P.C BOARDS BLOCK ..... 30
3. FINAL ASSEMBLY BLOCK ..... 32

Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

## HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read list.

The reference number corresponds with illustration or photo number of that particular parts list.

This number corresponds with the Figure Number.

This number corresponds with the individual parts index number in that figure.

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

**12-115x**

Schematic Diagram Number of individual manufactured part.
(not required for parts order)

| Ref. No. | Parts No. | Description | Schematic No. |
|---|---|---|---|
| | | **FLYWHEEL BLOCK #13** | |
| 12-115x | 800425 | Flywheel Block Assy. Comp. | RDG #13 |
| 12-116 | 244506 | Flywheel Only | RD-233 |
| 12-117x | 244754 | Felt, Flywheel | RD-275 |
| 12-118 | 251324 | Main Metal Case | RD-236 |
| 12-119 | 253080 | Main Metal | RD-237 |

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of components of the Schematic Diagram or Service Manual.
5. The indications of Resistors and Capacitors in the photos of P.C. Board are being eliminated.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.
   It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

**CAUTION:**

1. When placing an order for parts, be sure to list the parts no. model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because parts number and parts unit supply in the Preliminary Service Manual (Basic Parts List) may be partially changed, please use this parts list for all future reference.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMEMNDED PARTS.

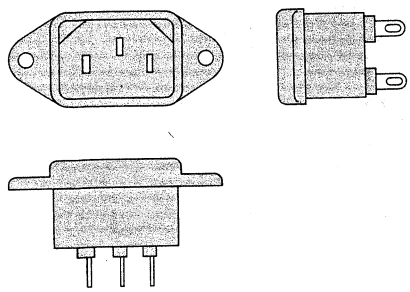
AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

## AC INLET SYSTEM

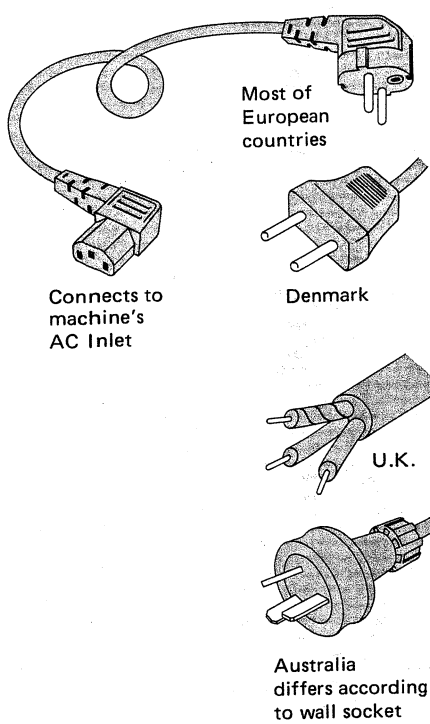
This model is equipped with an AC INLET SYSTEM. Please refer to the AC INLET SYSTEM CHART below for the specific type. By the AC INLET SYSTEM, AC (mains) cord can be connected to and disconnected from the model because the model is provided with socket exclusively for AC (mains) cord on its main body.
Please note, however, that certain models are not equipped with this system and has a built-in AC (mains) cord as before.

## AC INLET SYSTEM CHART

### CLASS I

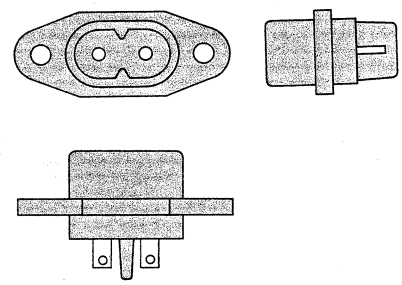


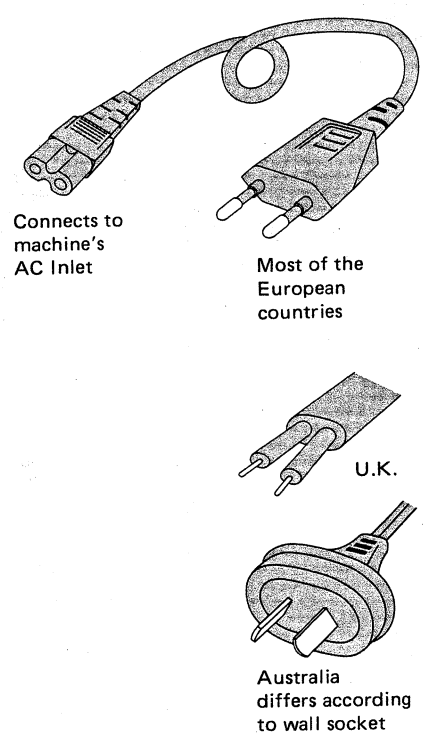
Picture 1
AC INLET to be installed on machines




### CLASS II

▣ This mark indicating double insulation will be attached to machine's rear panel



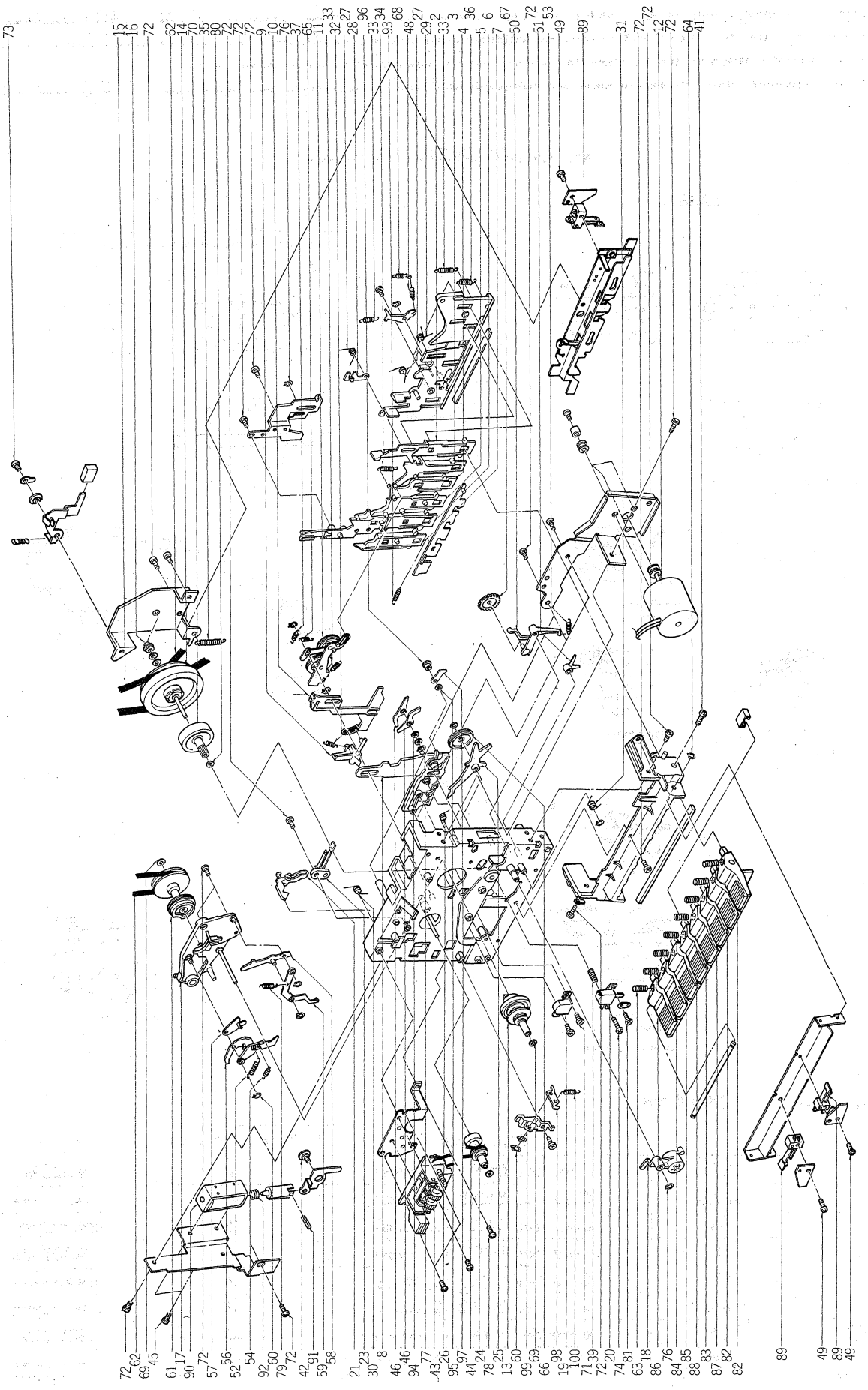



Picture 2
AC (mains) cord

**Parts List for AC (mains) Cord Set**

| Standard | | Description | Type of AC Inlet | Parts No. |
|---|---|---|---|---|
| Class I | CEE | Cord Set CEE (3 cores) | 3P | EW302993 |
| | BEAB | Cord Set BEAB (3 cores) | 3P | EW302994 |
| | SAA | Cord Set SAA (3 cores) | 3P | EW302996 |
| | U/T | Cord Set U/T (3 cores) | 3P | EW302646 |
| Class II | CEE | Cord Set CEE (2 cores) | 2P | EW638144 |
| | BEAB | Cord Set BEAB (2 cores) | 2P | EW302995 |
| | SAA | Cord Set SAA (2 cores) | 2P | EW302991 |
| | U/T | Cord Set U/T (2 cores) | 2P | EW302899 |

# 1. MECHA BLOCK



# 1 MECHA BLOCK

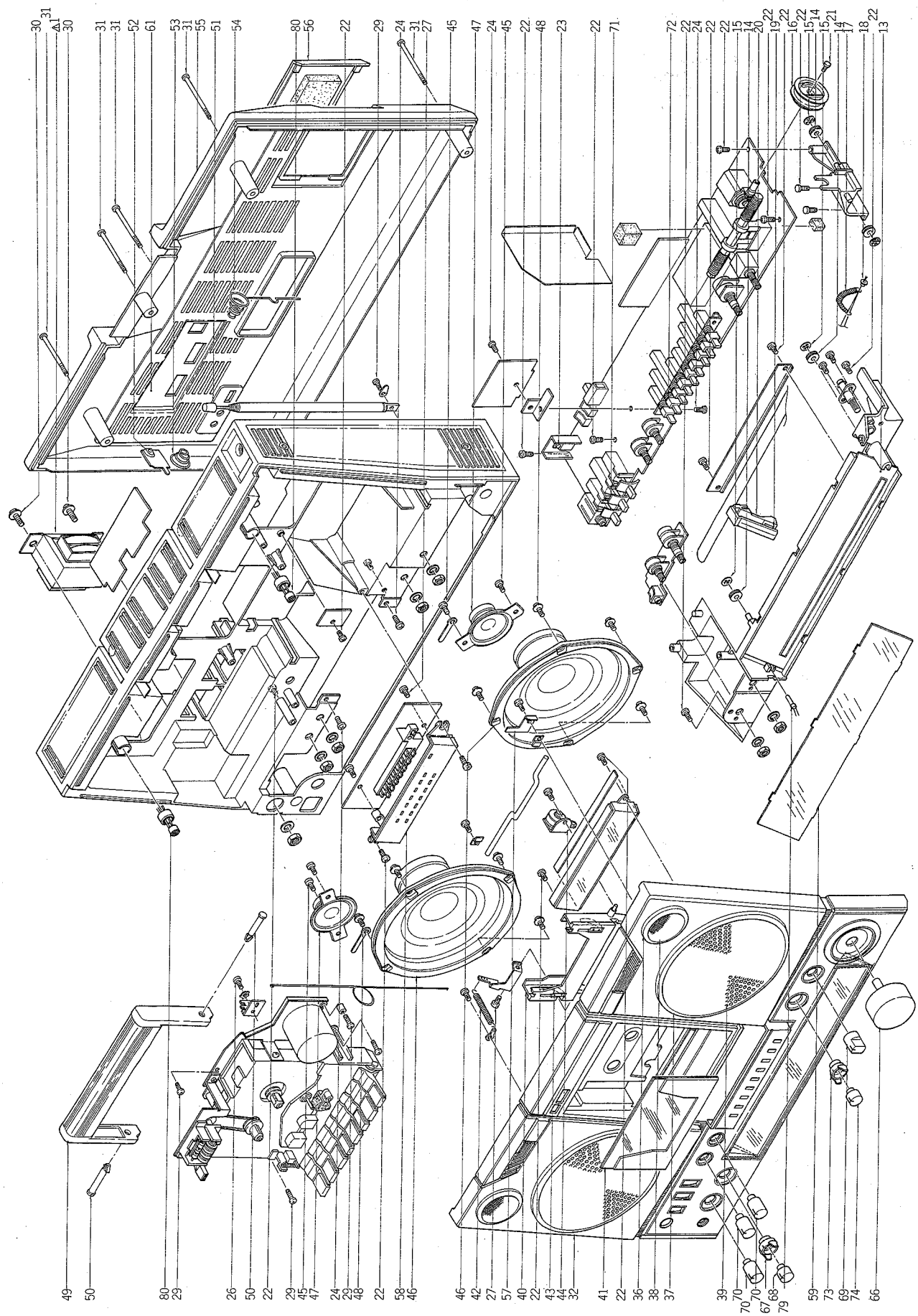
| Ref. No. | Parts No. | Description | Schematic No. |
|---|---|---|---|
| 1-1x | BZ704197 | Mecha BLK AJ-500 | 2571166700 |
| 1-2 | TK703933 | Operation (PAUSE) AJ-500 | 2578313400 |
| 1-3 | SB703330 | Operation (FF) AJ-490 | 2578313800 |
| 1-4 | TK703935 | Operation (PLAY) AJ-500 | 2578313700 |
| 1-5 | SB703331 | Operation (REW) AJ-490 | 2578313600 |
| 1-6 | SB703332 | Operation (REC) AJ-490 | 2578313300 |
| 1-7 | SB703333 | Operation (STOP) AJ-490 | 2578313500 |
| 1-8 | ML703334 | Head Slider AJ-490 | 2578320000 |
| 1-9 | ML703335 | Eject Lever AJ-490 | 2578222500 |
| 1-10 | ML703336 | SW. Slider AJ-490 | 2578313900 |
| 1-11 | TK703419 | REW Slider AJ-490 | 2571933100 |
| 1-12 | BM703409 | Motor w/Pulley AJ-490 | 2212557400 |
| 1-13 | BR703413 | Take-up Reel Table Assy AJ-490 | 2571234000 |
| 1-14 | BF703412 | Flywheel Assy AJ-490 | 2571742000 |
| 1-15 | MB703339 | Drive Belt AJ-490 | 2575533500 |
| 1-16 | MV703340 | Bearing AJ-490 | 2572534000 |
| 1-17 | TK703414 | ASO Chassis Assy AJ-490 | 2571944200 |
| 1-18 | BL703415 | Pinch Roller Lever Assy AJ-490 | 2571731800 |
| 1-19 | HE703341 | Erase Head HET-18 | 2221817100 |
| 1-20 | HP703342 | REC/P.B Head HRPT-50 | 2221730700 |
| 1-21 | ML703343 | REC Lock Lever AJ-490 | 2578222600 |
| 1-22x | ZG703344 | Holder Spring AJ-490 | 2577450600 |
| 1-23 | ES703345 | Leaf SW. 1C1P | 2219539900 |
| 1-24 | TK703417 | Drum Reel Assy AJ-490 | 2571231800 |
| 1-25 | TK703418 | Idler Mount Assy AJ-490 | 2571183800 |
| 1-26 | TK703346 | Idler Mount Spring AJ-490 | 2577325500 |
| 1-27 | ZG703347 | Operation (STOP) Spring AJ-490 | 2577325400 |
| 1-28 | ML702599 | Pause Lock Lever AJ-360 | 2578217300 |
| 1-29 | ZG703349 | Operation (REW) Spring AJ-490 | 2577325300 |
| 1-30 | ZG703350 | REC Lock Spring AJ-490 | 2577333700 |
| 1-31 | ZG703351 | Pinch Roller Lever Spring AJ-490 | 2577330100 |
| 1-32 | ZG703352 | Spring 03TN33.5 AJ-490 | 2577177600 |
| 1-33 | ZG703353 | Spring 03TN14.5 AJ-490 | 2577172100 |
| 1-34 | ZG703354 | Spring 05TN19.5 AJ-490 | 2577171700 |
| 1-35 | ZG703355 | Spring 035TN37.5 AJ-490 | 2577188200 |
| 1-36 | ZG703356 | Spring 04TN16.5 AJ-490 | 2577172200 |
| 1-37 | ZG703357 | Spring 035TN5 AJ-490 | 2577172300 |
| 1-38x | ZG703358 | P Lock Spring AJ-490 | 2577325200 |
| 1-39 | ZG703359 | Head Spring AJ-490 | 2577224000 |
| 1-40x | ZW318014 | Washer (BSP) D2.6x4.5x0.4t | |
| 1-41 | ZS555726 | Screw, Binding head 2.6x6 | |
| 1-42 | ZS742062 | Graduated Screw AC-3750 | 2270147200 |
| 1-43 | MC703360 | Counter AJ-490 | 2587320500 |
| 1-44 | MB703362 | Belt 1K41 AJ-490 | 2575535900 |
| 1-45 | ZS442585 | Screw, Binding head 2.6x4 | |
| 1-46 | ML703363 | Review Lever AJ-490 | 2574832100 |
| 1-47 | ML703364 | REC STOP Lever AJ-490 | 2574824500 |
| 1-48 | ZG703365 | Spring 03TN13.5 AJ-490 | 2577178100 |
| 1-49 | ZS659046 | Screw, pan head 2.6x10 | |
| 1-50 | ML703366 | ASO Lever AJ-490 | 2578217500 |
| 1-51 | ML703367 | Release Lever AJ-490 | 2578217100 |
| 1-52 | ZG703368 | Spring 03TN21 AJ-490 | 2577193700 |
| 1-53 | ZG703369 | Spring 02TN4.25 AJ-490 | 2577171400 |
| 1-54 | ZG703370 | Spring 02TN12.5 AJ-490 | 2577161000 |
| 1-55x | ML703371 | Pause Lever AJ-490 | 2578219400 |
| 1-56 | ML703373 | STOP Lever AJ-490 | 2578219300 |
| 1-57 | ML703374 | Bias Lever AJ-490 | 2578219700 |
| 1-58 | ML703376 | Detection Lever AJ-490 | 2578219500 |
| 1-59 | ML703377 | Push Lever AJ-490 | 2578219600 |
| 1-60 | ZW703378 | E Ring 2.5M AJ-490 | 2573519700 |
| 1-61 | TK703411 | Cam Wheel Assy AJ-490 | 2571342400 |
| 1-62 | MB703379 | Belt 1K46.5 AJ-490 | 2575539000 |
| 1-63 | ZG703380 | Button Spring AJ-490 | 2577244700 |
| 1-64 | ZW703381 | E Ring ERR040SKZN3A | 7405004000 |
| 1-65 | ZG703382 | Spring 03TN11.5 AJ-490 | 2577172400 |
| 1-66 | TK703420 | Take-up Idler Assy AJ-490 | 2571339600 |
| 1-67 | TK703384 | ASO Gear AJ-490 | 2575614900 |
| 1-68 | ZG703385 | Spring 02TN13.5 AJ-490 | 2577178000 |
| 1-69 | ZW702619 | Washer D1.7x4x0.5t (Polyslider) | 2576448900 |
| 1-70 | TK703410 | Clutch Wheel Assy AJ-490 | 2571736100 |
| 1-71 | ZS283353 | Tapping Screw #2 2x8 BR | |
| 1-72 | ZS306001 | Tapping Screw #2, 2.6x8 (Pan) | |
| 1-73 | ZS558145 | Tapping Screw #2, 2.6x10 | |
| 1-74 | ZS703936 | Special Screw 2x12 AJ-500 | 2270149300 |
| 1-75x | ZS703937 | Special Screw 2.6x6 AJ-500 | 2270717400 |
| 1-76 | ZW703386 | E Ring 3M AJ-490 | 2270318700 |
| 1-77 | ZW703387 | E Ring 4M AJ-490 | 2270318800 |
| 1-78 | ZS479474 | Screw, pan 2.6x5 | |
| 1-79 | ZG703388 | Spring 02TN29.5 AJ-490 | 2577600200 |
| 1-80 | ZW259367 | Washer D2.4x4.5x0.3t | |
| 1-81 | ZS609085 | Tapping Screw #2 2x6 (Pan) | |
| 1-82 | SK703938 | FF Knob AJ-500 | 2581656400 |
| 1-83 | SK703939 | Play Knob AJ-500 | 2581656800 |
| 1-84 | SK703940 | REC Knob AJ-500 | 2581656600 |
| 1-85 | SK703941 | REW Knob AJ-500 | 2581656500 |
| 1-86 | SK703942 | STOP Knob AJ-500 | 2581656700 |
| 1-87 | SK703943 | FF-ISO Knob Part AJ-500 | 2283578700 |
| 1-88 | SK703944 | REW-ISO Knob Part AJ-500 | 2283578600 |
| 1-89 | ES703946 | Leaf SW. AJ-500 | 2219519900 |
| 1-90 | EP703947 | Plunger AJ-500 | 2214721100 |
| 1-91 | MH703948 | Spring Pin D2.5 AJ-500 | 2270718300 |
| 1-92 | ZG703949 | Clamp Spring AJ-500 | 2577232100 |
| 1-93 | ZG703950 | Lock Spring AJ-500 | 2577197000 |
| 1-94 | ZW259773 | Washer (Nylon) D4.1x7x0.5t | |
| 1-95 | ZW703951 | Friction Washer AJ-500 | 2576238500 |
| 1-96 | ZW703391 | Boss 4D1.6 AJ-490 | 2572537600 |
| 1-97 | ML703392 | Waiting Lever AJ-490 | 2578223600 |
| 1-98 | ML703393 | Lock Lever AJ-490 | 2578224300 |
| 1-99 | TK703394 | Lock Lever Mount AJ-490 | 2578318100 |
| 1-100 | ZG703395 | Spring 03TN14.5 AJ-490 | 2577158800 |

## 2 RADIO P.C BOARD BLOCK

| Symbol No. | Parts No. | Description | Schematic No. |
|---|---|---|---|
| 2-1 | BA703979 | Radio PCB Comp. AJ-500FS | 2213122700 |
| 2-2 | BA703981 | Radio PCB Comp. AJ-500FL | 2213122600 |
| 2-IC001 | EI704196 | IC TA-7120P | 4031100500 |
| 2-IC301,2 | EI702675 | IC LA3210B | 2211470500 |
| 2-IC401,2 | EI704195 | IC LB-1416 | 2211478500 |
| 2-IC501 | EI703977 | IC AN-7145 | 2211467100 |
| 2-IC901 | EI703253 | IC μPC1186H | 2211477700 |
| 2-TR101to3 | ET703254 | Transistor 2SC784TM(O) | 3673812000 |
| 2-TR201 | ET704191 | Transistor 2SC1815-0 | 3631742000 |
| 2-TR301,2 | ET741887 | Transistor 2SC732TM(BL) AC-3750 | 3673314000 |
| 2-TR303,4 | ET704191 | Transistor 2SC1815-0 | 3631742000 |
| 2-TR401to4 | ET704191 | Transistor 2SC1815-0 | 3631742000 |
| 2-TR405,6 | ET704192 | Transistor 2SA1015-0 | 3653402A00 |
| 2-TR501to4 | ET741887 | Transistor 2SC732TM(BL) AC-3750 | 3673314000 |
| 2-TR505,6 | ET741902 | Transistor 2SC1815(BL) AC-3750 | 3631748000 |
| 2-TR601,2 | ET704194 | Transistor 2SC1173-0 | 3677162000 |
| 2-TR701 | ET704194 | Transistor 2SC1173-0 | 3677162000 |
| 2-TR702 | ET704192 | Transistor 2SA1015-0 | 3653402A00 |
| 2-TR703,4 | ET704191 | Transistor 2SC1815-0 | 3631742000 |
| 2-TR705 | ET704192 | Transistor 2SA1015-0 | 3653402A00 |
| 2-D101 | ED702703 | Silicon Diode 1S1555V | 3724670300 |
| 2-D102 | ED702702 | Silicon Diode 1S2688 | 2211521000 |
| 2-D201 | ED704188 | LED 9PY9 | 2211555000 |
| 2-D203 | ED702703 | Silicon Diode 1S1555V | 3724670300 |
| 2-D301,2 | ED702703 | Silicon Diode 1S1555V | 3724670300 |
| 2-D401to4 | ED704187 | LED 9PR2 | 2211546900 |
| 2-D405to14 | ED704186 | LED 9PG2 | 2211555200 |
| 2-D601 | ED704189 | LED 9PR9 | 2211554900 |
| 2-D602,3 | ED704184 | Diode WZ100 | 2211555300 |
| 2-D604 | ED704185 | Diode S4VB10 | 2211548300 |
| 2-TC101,2 | EC742262 | Trimmer/C. | 2230908100 |
| 2-TC104,5 | EC703269 | Trimmer/C. AJ-490(FS) | 2230912800 |
| 2-TC105 | EC704179 | Trimmer/C. 1R(FL) | 2230913700 |
| 2-TC106to8 | EC742262 | Trimmer/C. | 2230908100 |
| 2-VC101 | EE703265 | Poly. Vari. Con AJ-490 | 2230829800 |
| 2-S1to9 | ES704178 | Push SW. AJ-500 | 2214060000 |
| 2-S10 | ES704174 | Push SW. AJ-500 | 2214060100 |
| 2-S11 | ES703273 | Rotary SW. AJ-490 | 2214058900 |
| 2-S12 | ES704177 | Lever SW. AJ-500 | 2214059700 |
| 2-S13 | ES704176 | Lever SW. AJ-500 | 2214059800 |
| 2-S14 | ES704175 | Lever SW. AJ-500 | 2214059900 |
| 2-S15 | ES703277 | Slide SW. AJ-490 | 2214060500 |
| 2-S16 | ES703268 | Slide SW. AJ-490 | 2214060600 |
| 2-IFT201 | BT703320 | FM-IF Trans. AJ-490 | 2226557000 |
| 2-VR301 | EV703399 | Double-Axial 2-Throw/Vol. D16 50k(D) | 2265520700 |
| 2-VR401,2 | EV703298 | Semi-Fixed/Vol. 10k | 2265845400 |
| 2-VR501 | EV704172 | Double Axial 2-Throw/Vol. 16W100k-D | 2265122500 |
| 2-VR502,3 | EV704173 | Double Axial 2-Throw/Vol. 16B50k-D | 2265121800 |
| 2-VR504 | EV704169 | Vol. 16B10k-W-T | 2265320000 |
| 2-VR801,2 | EV741979 | Semi-Fixed/Vol. 100k AC-3750 | 2265845600 |
| 2-J001 | EJ742263 | D3.5 Jack | 2216330700 |
| 2-J501,2 | EJ742263 | D3.5 Jack | 2216330700 |
| 2-J503 | EJ741975 | Mic. Jack 6.5-ST | 2216372000 |
| 2-L101 | EO742245 | FM-RF Coil | 2229409800 |
| 2-L102 | EO742244 | FM-RF Coil | 2229407000 |
| 2-L103 | EO742246 | FM Choke Coil | 2229100900 |
| 2-L104 | EO703261 | FM-RF Coil AJ-490 | 2229416300 |
| 2-L105 | EO742271 | SW2-ANT Coil (FS) | 2228219200 |
| 2-L105 | EO703272 | SW-ANT Coil AJ-490 (FL) | 2228219300 |
| 2-L106,7 | TK704181 | ANT Coil Assy AJ-500FS (FS) | 2224276500 |
| 2-L106,7 | TK704180 | ANT Coil Assy AJ-500FL (FL) | 2224276600 |
| 2-L108 | EO703264 | SW2-OSC Coil AJ-490 (FS) | 2228529500 |
| 2-L108 | EO703266 | SW-OSC Coil AJ-490 (FL) | 2228528600 |
| 2-L109 | EO703263 | SW1-OSC Coil AJ-490 (FS) | 2228529400 |
| 2-L109 | EO742249 | MW-OSC Coil (FL) | 2224535300 |
| 2-L110 | EO742249 | MW-OSC Coil (FS) | 2224535300 |
| 2-L110 | EO702670 | LW-OSC Coil (FL) | 2220505800 |
| 2-L301,2 | EO741959 | AF Choke Coil AC-3750 | 2221124100 |
| 2-L801 | EO703278 | TP-OSC Coil AJ-490 | 2221507800 |
| 2-C121 | EC742268 | Styrol/C. (Vert.) 360pF(J) 50WV (FS) | 223913610Q |
| 2-C121 | EC702672 | Styrol/C. (Vert.) 150pF(J) 50WV (FL) | 223911510Q |
| 2-C128 | EC704162 | Polypropylene/C. 100pF(J) 50WV (FL) | 223911010Q |
| 2-C209,10 | EC703401 | Solid Aluminum/C. 2.2μF | 2240205500 |
| 2-C301,2 | EC703291 | Solid Aluminum/C. 0.1μF | 2240205000 |
| 2-C311,2 | EC703400 | Solid Aluminum/C. 1μF | 2240205400 |
| 2-C317,8 | EC703402 | Solid Aluminum/C. 3.3μF | 2240205600 |
| 2-C319,20 | EC704166 | Styrol/C. 1200pF(J) 50WV | 223911220Q |
| 2-C325,6 | EC703401 | Solid Aluminum/C. 2.2μF | 2240205500 |
| 2-C333,4 | EC704165 | Styrol/C. 1500pF(J) 50WV | 223911520Q |
| 2-C337,8 | EC703400 | Solid Aluminum/C. 1μF | 2240205400 |
| 2-C342,3 | EC704167 | Solid Aluminum/C. 0.47μF | 2240205300 |
| 2-C344,5 | EC703401 | Solid Aluminum/C. 2.2μF | 2240205500 |
| 2-C403,4 | EC703402 | Solid Aluminum/C. 3.3μF | 2240205600 |
| 2-C501,2 | EC704164 | NP/C. 4.7μF 10WV | 2240302200 |
| 2-C515,6 | EC703400 | Solid Aluminum/C. 1μF | 2240205400 |
| 2-C519,20 | EC703296 | Solid Aluminum/C. 0.22μF | 2240205100 |
| 2-C523,4 | EC703296 | Solid Aluminum/C. 0.22μF | 2240205100 |
| 2-C531,2 | EC703396 | Solid Aluminum/C. 0.33μF | 2240205200 |
| 2-C548 | EC703400 | Solid Aluminum/C. 1μF | 2240205400 |
| 2-C704 | EC704167 | Solid Aluminum/C. 0.47μF | 2240205300 |
| 2-C803 | EC703323 | Styrol/C. 820pF(J) 100WV | 2232118800 |
| 2-C804 | EC703324 | Styrol/C. 8200pF(J) 100WV | 2232118900 |
| 2-C808 | EC704163 | Polypropylene/C. 1500pF (J) 100WV | 2232118300 |
| 2-C901,2 | EC703401 | Solid Aluminum/C. 2.2μF | 2240205500 |
| 2-R218 | ER704156 | Metal Oxide Film/R. 2W 56 ohms | 2257356001 |
| 2-R360 | ER704170 | Metal Oxide Film/R. 1W 270 ohms | 2257127101 |
| 2-R545 | ER704152 | Fuse/R. 1/4W 22 ohms(J) | 2250024900 |
| 2-R602,3 | ER704159 | Metal Oxide Film/R. 1W 470 ohms | 2257147101 |
| 2-R604 | ER704151 | Fuse/R. 1W 5.6 ohms(J) | 2250025000 |
| 2-R704 | ER704156 | Metal Oxide Film/R. 2W 56 ohms | 2257356001 |
| 2-R801 | ER704154 | Metal Oxide Film/R. 1W 10 ohms (J) | 2257110000 |
| 2-R802 | ER704155 | Metal Oxide Film/R. 1W 56 ohms (J) | 2257156000 |
| 2-R807 | ER704161 | Metal Oxide Film/R. 1W 27 ohms | 2257127001 |
| 2-R809 | ER704153 | Metal Oxide Film/R. 1W 39 ohms (J) | 2257139000 |
| 2-R915 | ER704157 | Metal Oxide Film/R. 1W 220 ohms | 2257122101 |
| 2-3 | EJ703408 | Jack Assy AJ-490 | 2216374900 |
| 2-4 | TK703280 | Condenser Mic AJ-490 | 2215422100 |
| 2-5 | EL704168 | Lamp 0.04A 9V | 2211346600 |

| Symbol No. | Parts No. | Description | Schematic No. |
|---|---|---|---|
| | **IF P.C BOARD BLOCK** | | |
| 2-6 | BA703510 | IF PCB Comp. AJ-490 | 2213646100 |
| 2-IC201 | EI702666 | IC AN7218-BB | 2211467900 |
| 2-IC202 | EI703294 | IC HA11227 | 2211467800 |
| 2-TR201,2 | ET703295 | Transistor 2SC1815(Y) | 3631744000 |
| 2-D201,2 | ED741904 | Diode 1S1555V AC-3750 | 3724670300 |
| 2-D203to5 | ED703259 | Diode IN60 | 3700090000 |
| 2-SVR202 | EV703299 | Semi-Fixed/Vol. 500 ohms | 2265844300 |
| 2-IT201 | BT742251 | FM-IF Trans. | 2226728500 |
| 2-IT202 | BT703297 | AM-IF Trans. AJ-490 | 2226478300 |
| 2-IT203 | BT742253 | AM-IF Trans. | 2226476700 |
| 2-IT204 | BT742254 | AM-IF Trans. | 2226635200 |
| 2-CF | ER742257 | Ceramic Filter | 2215309600 |
| 2-CR201 | EI742266 | CR Block | 2213412200 |
| 2-CR202 | EI742267 | CR Block | 2213412300 |
| 2-C205 | EC702683 | Solid Aluminum/C. (Vert.) 1μF(M) 16WV | 2240203400 |
| 2-C231 | EC703327 | Styrol/C. 470pF(J) 50WV | 223914710P |
| 2-C232 | EC702643 | Solid Aluminum/C. (Vert.) 0.33μF(M) 16WV | 2240203200 |
| 2-C233 | EC702683 | Solid Aluminum/C. (Vert.) 1μF(M) 16WV | 2240203400 |
| 2-C234 | EC703348 | Solid Aluminum/C. 2.2μF | 2240203600 |
| 2-C237 | EC702683 | Solid Aluminum/C. (Vert.) 1μF(M) 16WV | 2240203400 |
| 2-R233 | EV703298 | Semi-Fixed/Vol. 10k | 2265845400 |

## 3. FINAL ASSEMBLY BLOCK



## 3 FINAL ASSEMBLY BLOCK

| Ref. No. | Parts No. | Description | Schematic No. |
|---|---|---|---|
| | | **POWER SUPPLY P.C BOARD BLOCK** | |
| 3-1 | BT704117 | ⚠ Power Trans. AJ-500(U/T) | 2222351100 |
| 3-2x | BT704146 | ⚠ Power Trans. AJ-500(CSA) | 2222351400 |
| 3-3x | BT704149 | ⚠ Power Trans. AJ-500(CEE) | 2222351200 |
| 3-4x | BT704145 | ⚠ Power Trans. AJ-500(UK) | 2222351500 |
| 3-5x | BT704148 | ⚠ Power Trans. AJ-500(SAA) | 2222351300 |
| 3-6x | EJ703288 | ⚠ AC Socket AJ-490 (U/T) | 2216786700 |
| 3-7x | EJ702640 | ⚠ AC Socket (SAA,CEE,UK) | 2216786800 |
| 3-8x | EJ703287 | ⚠ AC Socket AJ-490(CSA) | 2216787800 |
| 3-9x | EJ704143 | ⚠ Power Jack AJ-500FS(U/T) | 2216375000 |
| 3-10x | EF702644 | ⚠ Fuse 1.6A | 2214419700 |
| 3-11x | ED704185 | Diode S4VB10 | 2211548300 |
| 3-12x | EC704144 | Elect./C. 2200μF 25WV | 2244012600 |
| 3-13x | ER704142 | Metal Oxide Film/R. 2W 1.2k | 2257312201 |
| | | **FINAL ASSEMBLY BLOCK** | |
| 3-14 | TK704118 | Dial Back AJ-500 | 2284788700 |
| 3-15 | MR703238 | Pulley AJ-490 | 2274203800 |
| 3-16 | ZW742103 | Push Nut CS 3.0 AC-3750 | 7406003039 |
| 3-17 | TK703239 | Drum AJ-490 | 2274261900 |
| 3-18 | ZG703307 | Pull Spring AJ-490 | 2277162400 |
| 3-19 | TA703308 | Dial Thread AJ-490 | 2277200300 |
| 3-20 | TK703975 | Pointer AJ-500 | 2274164900 |
| 3-21 | TK703976 | Pointer Base AJ-500 | 2275556100 |
| 3-22 | ZS563444 | Screw, binding head 2.6×8 | |
| 3-23 | ZS303225 | Tapping Screw, #2 bind 3×10 | |
| 3-24 | ZS703982 | Special Screw AJ-500 | 3079585700 |
| 3-25 | ZS379405 | Screw, binding head 3×6 | |
| 3-26x | ZS419670 | Screw, pan 3×12 | |
| 3-27 | ZS479474 | Screw, pan 2.6×5 | |
| 3-28 | ZS490228 | Tapping Screw #2, 3×8 (Bind) | |
| 3-29x | ZS309315 | Tapping Screw, #2 BR 3×10 (Black) | |
| 3-30 | ZS609131 | Tapping Screw #2, 3×12 pan head | |
| 3-31 | ZS428308 | Tapping Screw #2, 4×12 (Bind) | |
| 3-32 | ZS702661 | Special Screw | 2270153300 |
| 3-33 | BC703953 | Cabinet Assy AJ-500FS | 2283192200 |
| 3-34x | BC703952 | Cabinet Assy AJ-500FL | 2283192600 |
| 3-35x | TK703954 | Dial Cover AJ-500 | 2283783400 |
| 3-36x | TK703955 | Meter Cover AJ-500 | 2283281900 |
| 3-37 | ZW703957 | Decoration Ring (Tweeter) AJ-500 | 2283391300 |
| 3-38 | ZW703958 | Decoration Ring (Speaker) AJ-500 | 2283391400 |
| 3-39 | TK703959 | Mesh (Tweeter) AJ-500 | 2284459200 |
| 3-40 | TK703960 | Mesh (Speaker) AJ-500 | 2284459300 |
| 4-41 | TK703961 | Cassette Holder AJ-500 | 2283281700 |
| 4-42 | TK703962 | Cassette Cover Assy AJ-500 | 2283282500 |
| 4-43 | ZG703963 | Pull Spring AJ-500 | 2277188900 |
| 3-44 | ZG703224 | Plate Spring AJ-490 | 2277260600 |
| 3-45 | TK703422 | Damper Assy AJ-490 | 2574660800 |
| 3-46 | ZS472274 | Tapping Screw #2, 3×6 (Bind) | |
| 3-47 | SS703964 | Speaker D160 AJ-500 | 2215179900 |
| 3-48 | SS703965 | Speaker D50 AJ-500 | 2215179800 |
| 3-49 | ZS703301 | Tapping Screw, #2 pan 3×8 D=8 w/Frange | 2079590800 |
| 3-50 | TK703966 | Handle Assy AJ-500 | 2282853500 |
| 3-51 | TK703302 | Handle Shaft AJ-490 | 2274358700 |
| 3-52 | EE703968 | Rod Ant AJ-500 | 2212427600 |
| 3-53 | TK742237 | Contact (C) AJ-360 | 2273315300 |
| 3-54 | ZG703969 | Cone Spring AJ-500 | 2272554600 |
| 3-55 | ZG703970 | Cone Spring AJ-500 | 2070777100 |
| 3-56 | BC703971 | Back Cabinet AJ-500 | 2283191300 |
| 3-57 | TK703972 | Battery Cover Assy AJ-500 | 2283282400 |
| 3-58 | ZG703973 | Plate Spring AJ-500 | 2277261200 |
| 3-59 | TK703984 | LED Holder Assy AJ-500 | 2275556700 |
| 3-60 | TK703857 | Dial Plate AJ-500FS | 2284788800 |
| 3-61x | TK703656 | Dial Plate AJ-500FL | 2284788900 |
| 3-62 | TK704119 | Main Label AJ-500(U/T) | 2286575800 |
| 3-63x | TK703987 | Main Label AJ-500(CSA) | 2286576900 |
| 3-64x | TK703988 | Main Label AJ-500(CEE) | 2286577100 |
| 3-65x | TK703986 | Main Label AJ-500(UK) | 2286577200 |
| 3-66x | TK703985 | Main Label AJ-500(SAA) | 2286577000 |
| 3-67 | SK703989 | Tuning Knob AJ-500 | 2283578400 |
| 3-68 | SK703314 | Vol. Knob (L) AJ-490 | 2283577000 |
| 3-69 | SK703316 | Vol. Knob AJ-490 | 2283576700 |
| 3-70 | SK703990 | Selector Knob AJ-500 | 2283578300 |
| 3-71 | SK703991 | Tone Knob AJ-500 | 2283578200 |
| 3-72 | SK703992 | Lever Knob AJ-500 | 2283578100 |
| 3-73 | SB703634 | Push Button AJ-500 | 2283578500 |
| 3-74 | SK703318 | Vol. Knob (L) AJ-490 | 2283578000 |
| 3-75 | SK703319 | Vol. Knob AJ-490 | 2283577900 |
| 3-76x | EJ703250 | 1P Plug AJ-490 | 2216483500 |
| 3-77x | EW702646 | ⚠ AC Cord AJ-360(U/T) | 2217651900 |
| 3-78x | EW702647 | ⚠ AC Cord AJ-360(CSA) | 2217650000 |
| 3-79x | EW702648 | ⚠ AC Cord AJ-360(CEE) | 2217649200 |
| 3-80x | EW703251 | ⚠ AC Cord AJ-490(UK) | 2217659800 |
| 3-81x | EW704141 | ⚠ AC Cord AJ-500(SAA) | 2217660000 |
| 3-82 | EL704168 | Lamp 0.04A 9V | 2211346600 |
| 3-83 | TK703280 | Condenser Mic AJ-490 | 2215422100 |

# INDEX

| Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. |
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| BA703510 | 2-6 | EE703265 | 2-VC101 | ET704194 | 2-TR601,2 | TK703346 | 1-26 | ZS419670 | 3-26x |
| BA703979 | 2-1 | EE703968 | 3-52 | ET704194 | 2-TR701 | TK703384 | 1-67 | ZS428308 | 3-31 |
| BA703981 | 2-2 | EF702644 | 3-10x | ET741887 | 2-TR301,2 | TK703394 | 1-99 | ZS442585 | 1-45 |
| BC703952 | 3-34x | EI702666 | 2-IC201 | ET741887 | 2-TR501to4 | TK703410 | 1-70 | ZS472274 | 3-46 |
| BC703953 | 3-33 | EI702675 | 2-IC301,2 | ET741902 | 2-TR505,6 | TK703411 | 1-61 | ZS479474 | 1-78 |
| BC703971 | 3-56 | EI703253 | 2-IC901 | EV703298 | 2-VR401,2 | TK703414 | 1-17 | ZS479474 | 3-27 |
| BF703412 | 1-14 | EI703294 | 2-IC202 | EV703298 | 2-R233 | TK703417 | 1-24 | ZS490228 | 3-28 |
| BL703415 | 1-18 | EI703977 | 2-IC501 | EV703299 | 2-SVR202 | TK703418 | 1-25 | ZS555726 | 1-41 |
| BM703409 | 1-12 | EI704195 | 2-IC401,2 | EV703399 | 2-VR301 | TK703419 | 1-11 | ZS558145 | 1-73 |
| BR703413 | 1-13 | EI704196 | 2-IC001 | EV704169 | 2-VR504 | TK703420 | 1-66 | ZS563444 | 3-22 |
| BT703297 | 2-IT202 | EI742266 | 2-CR201 | EV704172 | 2-VR501 | TK703422 | 3-45 | ZS609085 | 1-81 |
| BT703320 | 2-IFT201 | EI742267 | 2-CR202 | EV704173 | 2-VR502,3 | TK703656 | 3-61x | ZS609131 | 3-30 |
| BT704117 | 3-1 | EJ702640 | 3-7x | EV741979 | 2-VR801,2 | TK703857 | 3-60 | ZS659046 | 1-49 |
| BT704145 | 3-4x | EJ703250 | 3-76x | EW702646 | 3-77x | TK703933 | 1-2 | ZS702661 | 3-32 |
| BT704146 | 3-2x | EJ703287 | 3-8x | EW702647 | 3-78x | TK703935 | 1-4 | ZS703301 | 3-49 |
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| BT704149 | 3-3x | EJ703408 | 2-3 | EW703251 | 3-80x | TK703955 | 3-36x | ZS703937 | 1-75x |
| BT742251 | 2-IT201 | EJ704143 | 3-9x | EW704141 | 3-81x | TK703959 | 3-39 | ZS703982 | 3-24 |
| BT742253 | 2-IT203 | EJ741975 | 2-J503 | HE703341 | 1-19 | TK703960 | 3-40 | ZS742062 | 1-42 |
| BT742254 | 2-IT204 | EJ742263 | 2-J001 | JP703342 | 1-20 | TK703961 | 4-41 | ZW259367 | 1-80 |
| BZ704197 | 1-1x | EJ742263 | 2-J501,2 | MB703339 | 1-15 | TK703962 | 4-42 | ZW259773 | 1-94 |
| EC702643 | 2-C232 | EL704168 | 2-5 | MB703362 | 1-44 | TK703966 | 3-50 | ZW318014 | 1-40x |
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| EC702683 | 2-C205 | EO702670 | 2-L110 | MC703360 | 1-43 | TK703975 | 3-20 | ZW703378 | 1-60 |
| EC702683 | 2-C233 | EO703261 | 2-L104 | MH703948 | 1-91 | TK703976 | 3-21 | ZW703381 | 1-64 |
| EC702683 | 2-C237 | EO703263 | 2-L109 | ML702599 | 1-28 | TK703984 | 3-59 | ZW703386 | 1-76 |
| EC703269 | 2-TC104,5 | EO703264 | 2-L108 | ML703334 | 1-8 | TK703985 | 3-66x | ZW703387 | 1-77 |
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| EC703348 | 2-C234 | EO742246 | 2-L103 | ML703367 | 1-51 | TK704181 | 2-L106,7 | | |
| EC703396 | 2-C531,2 | EO742249 | 2-L109 | ML703371 | 1-55x | TK742237 | 3-53 | | |
| EC703400 | 2-C311,2 | EO742249 | 2-L110 | ML703373 | 1-56 | ZG703224 | 3-44 | | |
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| EC703400 | 2-C548 | ER704142 | 3-13x | ML703377 | 1-59 | ZG703347 | 1-27 | | |
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| ED703259 | 2-D203to5 | ET703254 | 2-TR101to3 | SK703991 | 3-71 | ZG703963 | 4-43 | | |
| ED704184 | 2-D602,3 | ET703295 | 2-TR201,2 | SK703992 | 3-72 | ZG703969 | 3-54 | | |
| ED704185 | 2-D604 | ET704191 | 2-TR201 | SS703964 | 3-47 | ZG703970 | 3-55 | | |
| ED704185 | 3-11x | ET704191 | 2-TR303,4 | SS703965 | 3-48 | ZG703973 | 3-58 | | |
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| ED704187 | 2-D401to4 | ET704191 | 2-TR703,4 | TK703239 | 3-17 | ZS303225 | 3-23 | | |
| ED704188 | 2-D201 | ET704192 | 2-TR405,6 | TK703280 | 2-4 | ZS306001 | 1-72 | | |
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| ED741904 | 2-D201,2 | ET704192 | 2-TR705 | TK703302 | 3-51 | ZS379405 | 3-25 | | |

SECTION 3

# SCHEMATIC DIAGRAM

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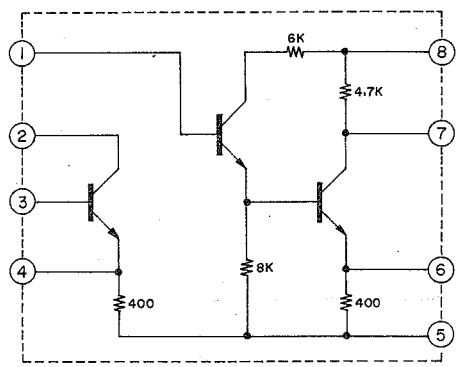
2. AJ-500FS NO. 3-1 1581838A SCHEMATIC DIAGRAM
3. AJ-500FL NO. 3-2 1581839A SCHEMATIC DIAGRAM
4. AJ-500FS/FL IF NO. 3-3 1581410A SCHEMATIC DIAGRAM

LA3210B

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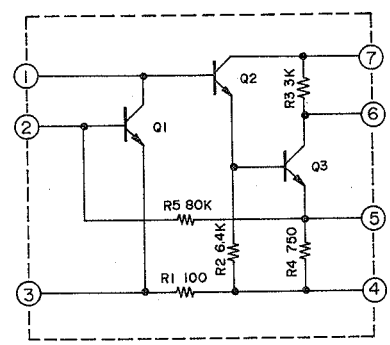


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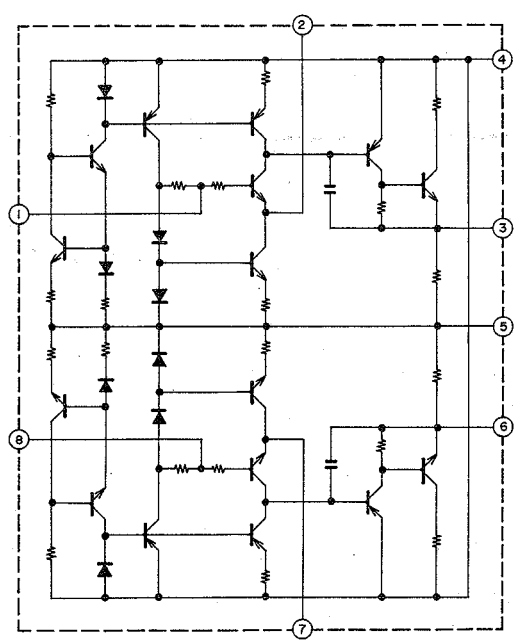

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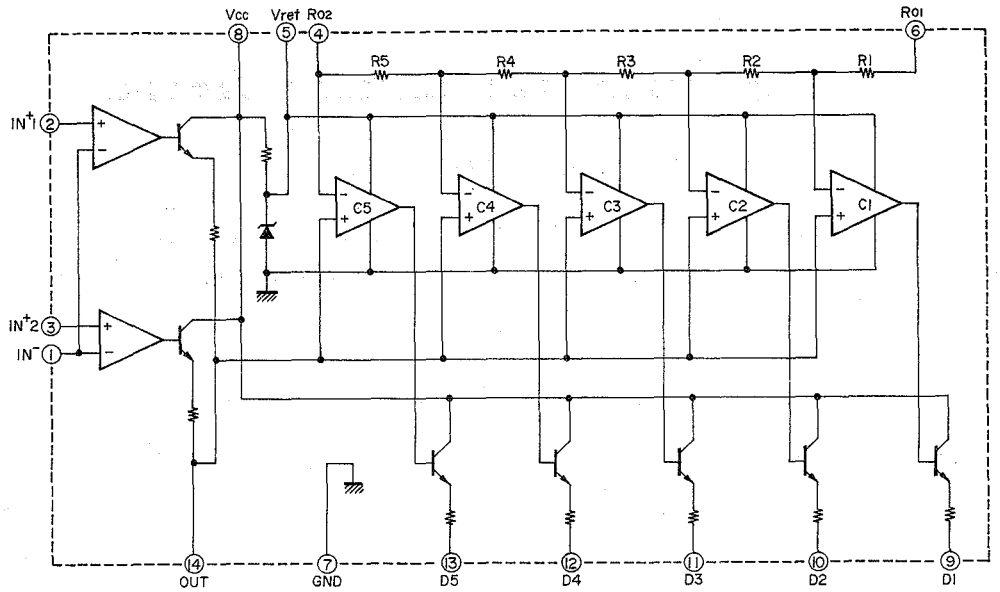


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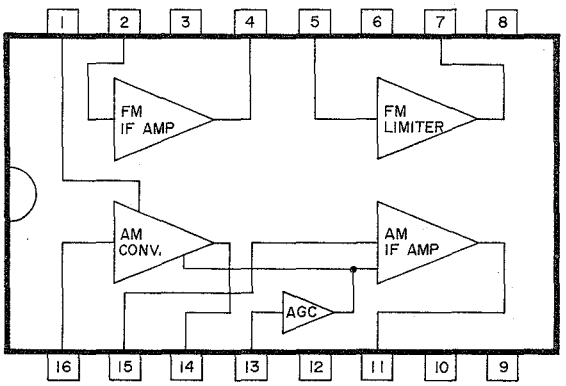


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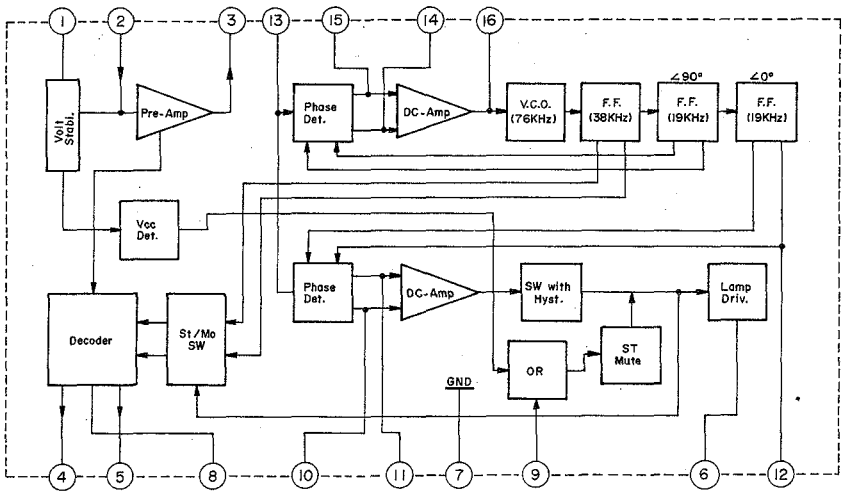
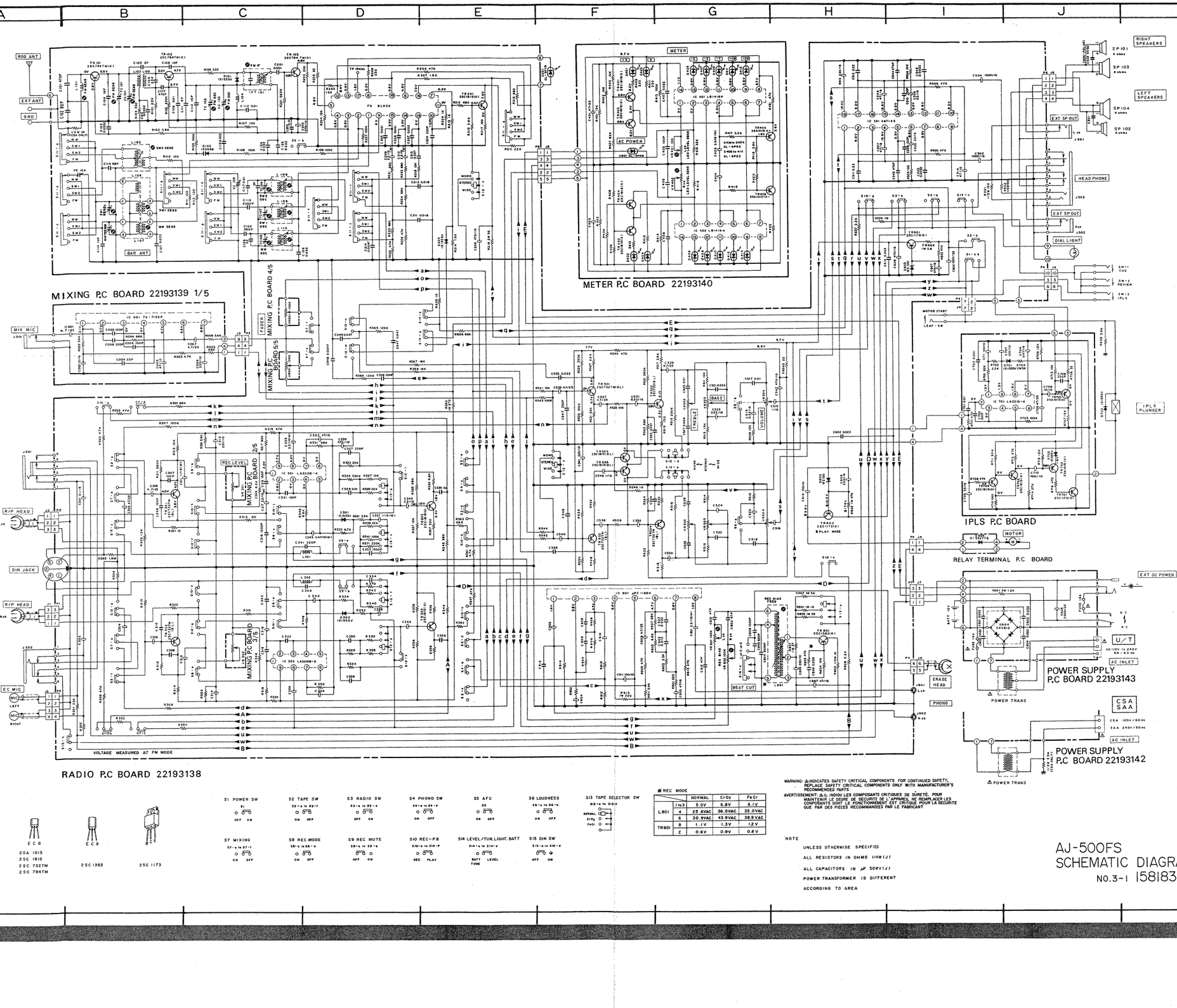





E C B
2SA 1015
2SC 1815
2SC 732TM
2SC 784TM

E C B
2SC 1383

2SC 1173

S1 POWER SW — S1 — OFF ON

S2 TAPE SW — S2-a to S2-f — ON OFF

S3 RADIO SW — S3-a to S3-d — OFF ON

S4 PHONO SW — S4-a to S4-d — ON OFF

S5 AFC — S5 — ON OFF

S6 LOUDNESS — S6-a to S6-b — ON OFF

S13 TAPE SELECTOR SW — S13-a to S13-f — NORMAL CrO2 FeCr

S7 MIXING — S7-a to S7-1 — ON OFF

S8 REC MODE — S8-a to S8-d — ON OFF

S9 REC MUTE — S9-a to S9-b — OFF ON

S10 REC-PB — S10-a to S10-P — REC PLAY

S14 LEVEL/TUN.LIGHT. BATT — S14-a to S14-d — BATT. LEVEL TUNE

S15 DIN SW — S15-a to S15-d — OFF ON

※ REC MODE

| | | NORMAL | CrO2 | FeCr |
|---|---|---|---|---|
| L801 | 1 to 3 | 5.0V | 6.8V | 6.1V |
| | 4 | 25.6VAC | 36.0VAC | 32.0VAC |
| | 6 | 30.9VAC | 43.9VAC | 38.9VAC |
| TR801 | 8 | 1.1V | 1.3V | 1.2V |
| | E | 0.6V | 0.9V | 0.8V |

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQU LES COMPOSANTS CRITIQUES DE SURETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE

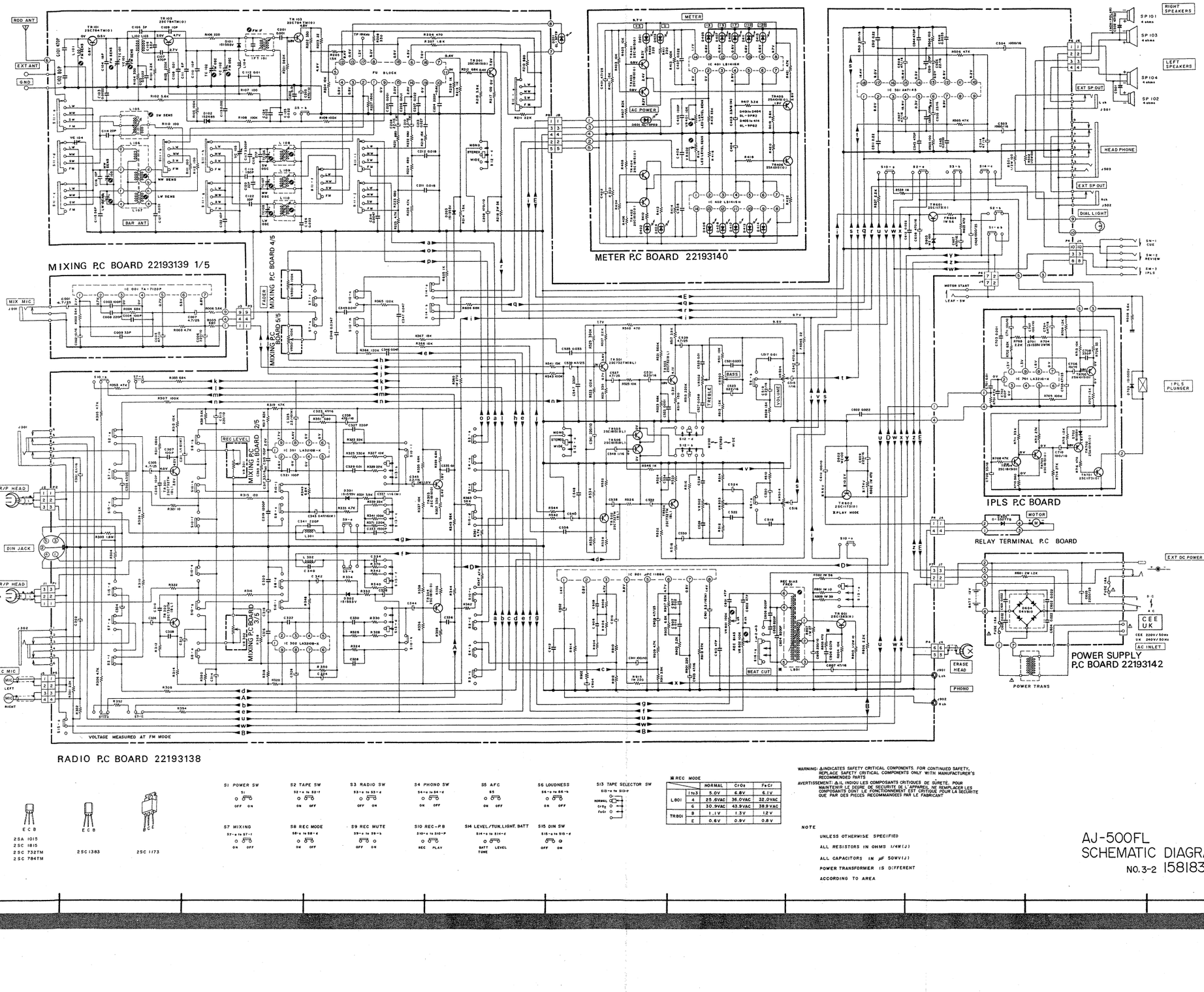
UNLESS OTHERWISE SPECIFIED

ALL RESISTORS IN OHMS 1/4W(J)

ALL CAPACITORS IN μF 50WV(J)

POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

# AJ-500FS
# SCHEMATIC DIAGRAM
NO.3-1 1581838A
2C




E C B
2SA 1015
2SC 1815
2SC 732TM
2SC 784TM

E C B
2SC1383

2SC 1173

S1 POWER SW
S1 OFF ON

S2 TAPE SW
S2-a to S2-f ON OFF

S3 RADIO SW
S3-a to S3-e OFF ON

S4 PHONO SW
S4-a to S4-d ON OFF

S5 AFC
S5 OFF

S6 LOUDNESS
S6-a to S6-b ON OFF

S13 TAPE SELECTOR SW
S13-a to S13-f
NORMAL
CrO2
FeCr

S7 MIXING
S7-a to S7-i ON OFF

S8 REC MODE
S8-a to S8-d ON OFF

S9 REC MUTE
S9-a to S9-b OFF ON

S10 REC-PB
S10-a to S10-P REC PLAY

S14 LEVEL/TUN.LIGHT.BATT
S14-a to S14-d BATT LEVEL TUNE

S15 DIN SW
S15-a to S15-d OFF ON

※REC MODE

| | | NORMAL | CrO2 | FeCr |
|---|---|---|---|---|
| L801 | 1 to 3 | 5.0V | 6.8V | 6.1V |
| | 4 | 25.6VAC | 36.0VAC | 32.0VAC |
| | 6 | 30.9VAC | 43.9VAC | 38.9VAC |
| TR801 | B | 1.1V | 1.3V | 1.2V |
| | E | 0.6V | 0.9V | 0.8V |

WARNING: △INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: △IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE

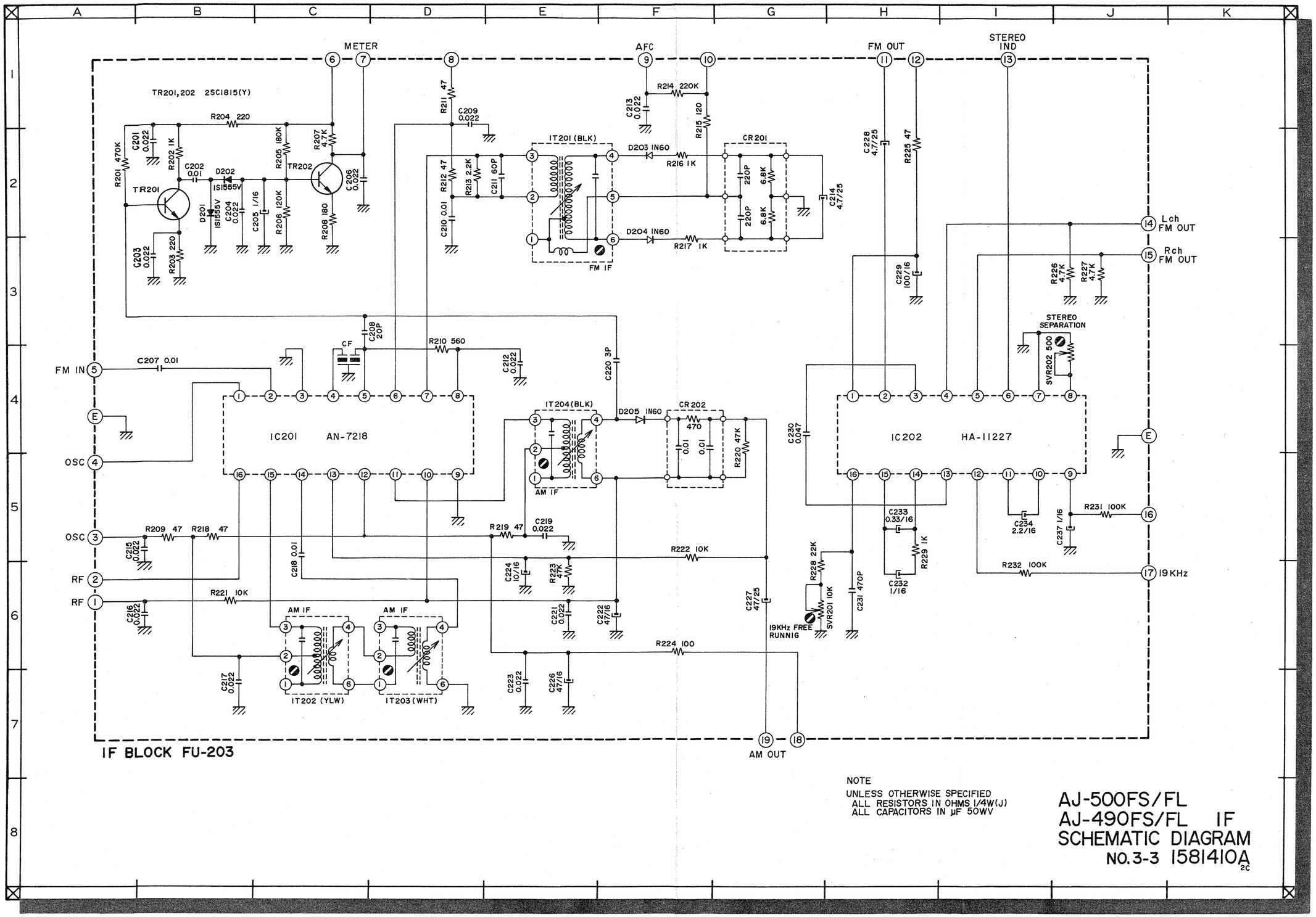
UNLESS OTHERWISE SPECIFIED

ALL RESISTORS IN OHMS 1/4W(J)

ALL CAPACITORS IN μF 50WV(J)

POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

# AJ-500FL
# SCHEMATIC DIAGRAM
NO.3-2 1581839A 2C




NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV

# AJ-500FS/FL
# AJ-490FS/FL IF
# SCHEMATIC DIAGRAM
NO.3-3 1581410A 2C